OUT WITH THE OLD IN WITH THE NEW ~ PROGRAM REQUIREMENTS AND COCATS4

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OBJECTIVES

- Better understanding of the new Program Requirements
- More insight into COCATS4

BOTH THE INTERNAL MEDICINE AND THE CARDIOVASCULAR DISEASE COMMON PROGRAM

- requirements added to section III.
  - Fellow Appointments (page 10)…. New requirements for both are in **III.A.1 THROUGH III.A.2.b).(5).(a)**

NEW TO CARDIOVASCULAR DISEASE COMMON PROGRAM REQUIREMENTS

- In addition, added to Cardiovascular Disease Common Program requirements added to section III.
  - Fellow Appointments (page 12) NEW **…III.A.2.b).(6), III.A.2.b).(6).(a) and III.A.2.c)**

III.A.1 THROUGH III.A.2.B).(5).(A)

Common Program Requirements

III. Fellow Appointments

III.A. Eligibility Criteria

The program director must comply with the criteria for resident eligibility as specified in the Institutional Requirements. (Core)

III.A.1. Eligibility Requirements – Residency Programs

III.A.1.a) **All prerequisite post-graduate clinical education required for initial entry or transfer into ACGME-accredited residency programs must be completed in ACGME-accredited residency programs, or in Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians of Canada (CFPC)-accredited residency programs located in Canada. Residency programs must receive verification of each applicant's level of competency in the required clinical field using ACGME or CanMEDS Milestones assessments from the prior training program.** (Core)

III.A.1.b) **A physician who has completed a residency program that was not accredited by ACGME, RCPSC, or CFPC may enter an ACGME-accredited residency program in the same specialty at the PGY-1 level and, at the discretion of the program director at the ACGME-accredited program may be advanced to the PGY-2 level based on ACGME Milestones assessments at the ACGME-accredited program. This provision applies only to entry into residency in those specialties for which an initial clinical year is not required for entry.** (Core)

III.A.1.c) **A Review Committee may grant the exception to the eligibility requirements specified in Section III.A.2.b) for residency programs that require completion of a prerequisite residency program prior to admission.** (Core)

Common Program Requirements

III.A.1.d) **Review Committees will grant no other exceptions to these eligibility requirements for residency education.** (Core)

III.A.2. **Eligibility Requirements – Fellowship Programs**

All required clinical education for entry into ACGME-accredited fellowship programs must be completed in an ACGME-accredited residency program, or in an RCPSC-accredited or CFPC- accredited residency program located in Canada. (Core)

Prior to appointment in the fellowship, fellows should have completed an ACGME- or RCPSC-accredited internal medicine program. (Core)

III.A.2.a) **Fellowship programs must receive verification of each entering fellow's level of competency in the required field using ACGME or CanMEDS Milestones assessments from the core residency program.** (Core)

III.A.2.b) **Fellow Eligibility Exception**

A Review Committee may grant the following exception to the fellowship eligibility requirements:

An ACGME-accredited fellowship program may accept an exceptionally qualified applicant, who does not satisfy the eligibility requirements listed in Sections III.A.2. and III.A.2.a), but who does meet all of the following additional qualifications and conditions:** (Core)

III.A.2.b).(1) **Assessment by the program director and fellowship selection committee of the applicant's suitability to enter the program, based on prior training and review of the summative evaluations of training in the core specialty; and,** (Core)

III.A.2.b).(2) **Review and approval of the applicant's exceptional qualifications by the GMEC or a subcommittee of the GMEC; and,** (Core)

III.A.2.b).(3) **Satisfactory completion of the United States Medical Licensing Examination (USMLE) Steps 1, 2, and, if the applicant is eligible, 3; and,** (Core)

III.A.2.b).(4) **For an international graduate, verification of Educational Commission for Foreign Medical Graduates (ECFMG) certification; and,** (Core)

III.A.2.b).(5) **Applicants accepted by this exception must complete fellowship Milestones evaluation (for the purposes of establishment of baseline performance by the Clinical**

Common Program Requirements

Competency Committee), conducted by the receiving fellowship program within six weeks of matriculation. This evaluation may be waived for an applicant who has completed an ACGME International-accredited residency based on the applicant's Milestones evaluation conducted at the conclusion of the residency program; and, (Core)

III.A.2.b).(5).(a)

If the trainee does not meet the expected level of Milestones competency following entry into the fellowship program, the trainee must undergo a period of remediation, overseen by the Clinical Competency Committee and monitored by the GMEC or a subcommittee of the GMEC. This period of remediation must not count toward time in fellowship training. (Core)

** An exceptionally qualified applicant has (1) completed a non-ACGME-accredited residency program in the core specialty, and (2) demonstrated clinical excellence, in comparison to peers, throughout training. Additional evidence of exceptional qualifications is required, which may include one of the following: (a) participation in additional clinical or research training in the specialty or subspecialty; (b) demonstrated scholarship in the specialty or subspecialty; (c) demonstrated leadership during or after residency training; (d) completion of an ACGME-International-accredited residency program.

III.A.2.B).(6), III.A.2.B).(6).(A) AND III.A.2.C)

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III.A.2.b).(6)	Fellows from non-ACGME- or RCPSC-accredited internal medicine programs must have completed at least three years of internal medicine education prior to starting the fellowship. (Core)
III.A.2.b).(6).(a)	The program director must inform applicants from non-ACGME-accredited programs, prior to appointment and in writing, of the ABIM policies and procedures that will affect their eligibility for ABIM certification. (Detail)
III.A.2.c)	**The Review Committee for** Internal Medicine **does allow exceptions to the Eligibility Requirements for Fellowship Programs in Section III.A.2.** (Core)

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Not new but good to know where they are

IV.A.5.a).(2)	**Fellows must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. Fellows:** (Outcome)
IV.A.5.a).(2).(a)	must demonstrate competence in the performance of the following procedures: (Outcome)
IV.A.5.a).(2).(a).(i)	direct current cardioversion; (Outcome)
IV.A.5.a).(2).(a).(i).(a)	Each fellow must perform 10. (Detail)
IV.A.5.a).(2).(a).(ii)	echocardiography; (Outcome)

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IV.A.5.a).(2).(a).(ii).(a) Each fellow must perform a minimum of 75 and interpret a minimum of 150 studies, and observe the performance and interpretation of transesophageal cardiac studies. (Detail)

IV.A.5.a).(2).(a).(iii) exercise stress testing; (Outcome)

IV.A.5.a).(2).(a).(iii).(a) Each fellow must perform a minimum of 50 stress ECG tests. (Detail)

IV.A.5.a).(2).(a).(iv) right and left heart catheterization, including coronary arteriography; (Outcome)

IV.A.5.a).(2).(a).(iv).(a) Each fellow must participate in a minimum of 100 catheterizations. (Detail)

IV.A.5.a).(2).(a).(v) conscious sedation; (Outcome)

IV.A.5.a).(2).(a).(vi) placement and management of temporary pacemakers, including transvenous and transcutaneous; and, (Outcome)

IV.A.5.a).(2).(a).(vii) programming and follow-up surveillance of permanent pacemakers and ICDs. (Outcome)

IV.A.5.a).(2).(b) must demonstrate competence in the interpretation of:

IV.A.5.a).(2).(b).(i) ambulatory ECG recordings; (Outcome)

IV.A.5.a).(2).(b).(ii) electrocardiograms; (Outcome)

IV.A.5.a).(2).(b).(ii).(a) Each fellow must interpret a minimum of 3500 electrocardiograms. (Detail)

IV.A.5.a).(2).(b).(iii) nuclear cardiology; and, (Outcome)

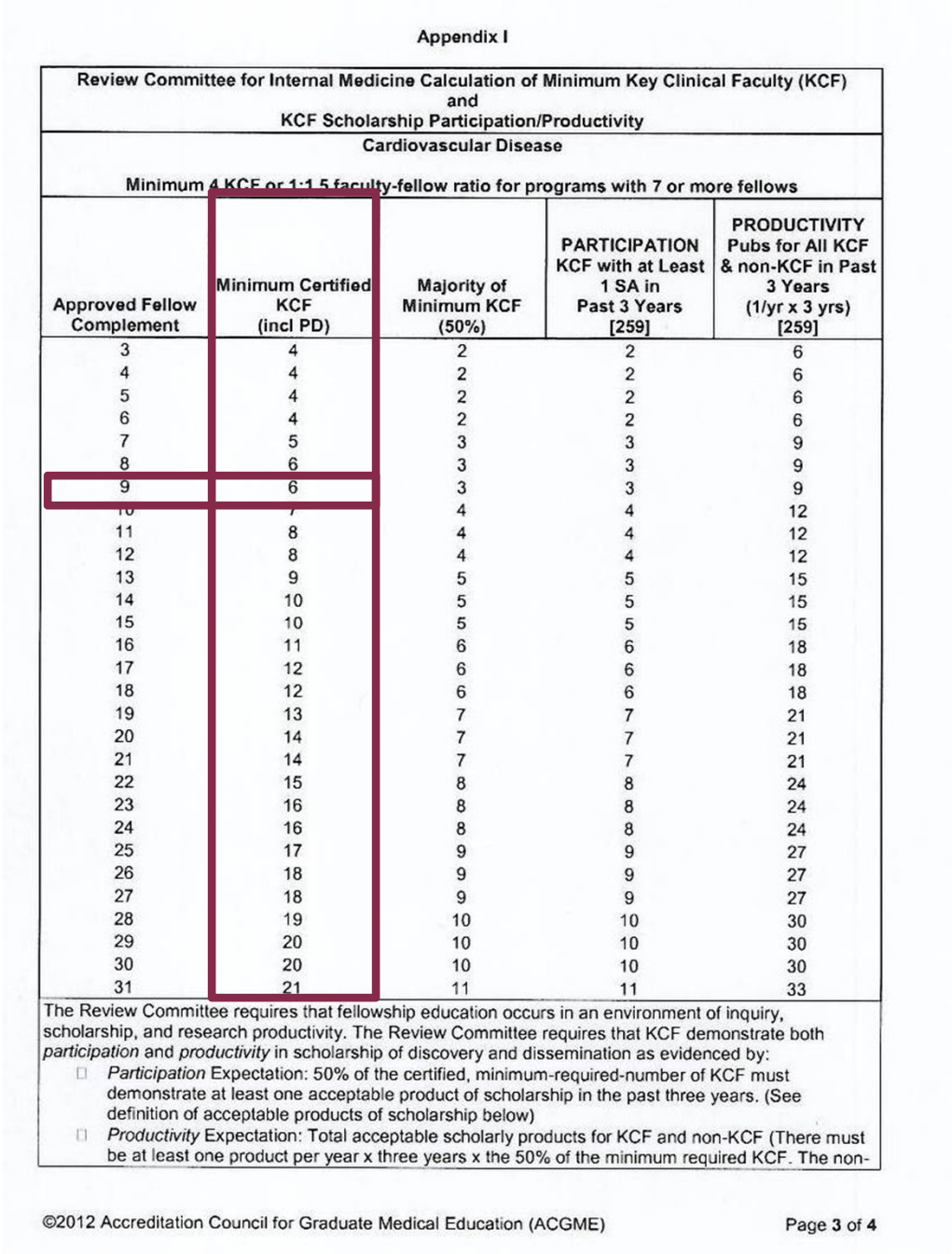
IV.A.5.a).(2).(b).(iii).(a) Each fellow must interpret a minimum of 100 radionuclide studies to include SPECT myocardial perfusion imaging and ventriculograms. (Detail)

IV.A.5.a).(2).(b).(iv) chest x-rays. (Outcome)

IV.A.5.b) **Medical Knowledge**

ACGME FAQ

Not new, but note worthy



Appendix I

Review Committee for Internal Medicine Calculation of Minimum Key Clinical Faculty (KCF) and KCF Scholarship Participation/Productivity

Cardiovascular Disease

Minimum 4 KCF or 1:1.5 faculty-fellow ratio for programs with 7 or more fellows

Approved Fellow Complement	Minimum Certified KCF (incl PD)	Majority of Minimum KCF (50%)	PARTICIPATION KCF with at Least 1 SA in Past 3 Years [259]	PRODUCTIVITY Pubs for All KCF & non-KCF in Past 3 Years (1/yr x 3 yrs) [259]
3	4	2	2	6
4	4	2	2	6
5	4	2	2	6
6	4	2	2	6
7	5	3	3	9
8	6	3	3	9
9	6	3	3	9
10	7	4	4	12
11	8	4	4	12
12	8	4	4	12
13	9	5	5	15
14	10	5	5	15
15	10	5	5	15
16	11	6	6	18
17	12	6	6	18
18	12	6	6	18
19	13	7	7	21
20	14	7	7	21
21	14	7	7	21
22	15	8	8	24
23	16	8	8	24
24	16	8	8	24
25	17	9	9	27
26	18	9	9	27
27	18	9	9	27
28	19	10	10	30
29	20	10	10	30
30	20	10	10	30
31	21	11	11	33

The Review Committee requires that fellowship education occurs in an environment of inquiry, scholarship, and research productivity. The Review Committee requires that KCF demonstrate both *participation* and *productivity* in scholarship of discovery and dissemination as evidenced by:

- *Participation* Expectation: 50% of the certified, minimum-required-number of KCF must demonstrate at least one acceptable product of scholarship in the past three years. (See definition of acceptable products of scholarship below)
- *Productivity* Expectation: Total acceptable scholarly products for KCF and non-KCF (There must be at least one product per year x three years x the 50% of the minimum required KCF. The non-

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LEVELS OF TRAINING

- **Level I** – The basic training required of all trainees to be competent consultant cardiologists. This can be accomplished during a standard 3-year training program in general cardiology.

- **Level II** – This refers to the additional training in 1 or more areas that enables some cardiologists to perform or interpret specific diagnostic tests and procedures or render more specialized care for specific patients and conditions. This level of training is recognized only for those areas in which a nationally accepted instrument or benchmark, such as a qualifying examination, is available to measure specific knowledge, skills, or competence. Level II training may be achieved by some trainees in selected areas during the standard 3-year general cardiology fellowship, depending on the trainee's career goals and use of elective periods.

- **Level III** – This level of training requires additional experience beyond the general cardiology fellowship to acquire specialized knowledge and competencies in performing, interpreting, and training others to perform specific procedures or for the trainee to render advanced, specialized care at a high level of skill. Level III training cannot generally be obtained during the standard 3-year general cardiology fellowship and requires additional exposure in a program that meets requirements delineated in Advanced Training Statements (formerly in Clinical Competence Statements) and developed for each specialized field of endeavour. Advanced (Level III) trained faculty should be available to participate in training Level I fellows in cardiac catheterization, interventional cardiology, and cardiac electrophysiology, but are not required for Level I training in other fields.

COCATS 4

Over the past several years, there has been a progressive move toward competency-based training, the key characteristic of which is evaluation focused on specific learner outcomes. The central requirements of such training are to delineate the specific components of competency within the subspecialty, define the tools necessary to assess training, and establish milestones that should be met as fellows progress toward independence. This evolution is manifested in COCATS 4, including the overarching 6-domain structure (Table 1) promulgated by the ACGME/American Board of Medical Specialties (ABMS) and endorsed by ABIM (5).

Table 1. ACGME Core Competencies

- **Patient Care** – that is compassionate, appropriate, and effective for treating health problems and promoting health
- **Medical Knowledge** – about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care
- **Practice-Based Learning and Improvement** – that involve investigation and evaluation of a fellow's patient care, self-appraisal, and assimilation of scientific evidence, and improvements in patient care
- **Interpersonal and Communication Skills** – that result in effective information exchange and teaming with patients, their families, and other health professionals
- **Professionalism** – as manifested by a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population
- **Systems-Based Practice** – as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value

These minimum general competencies were endorsed by the ACGME in February 1999 (www.acgme.org) and all Residency Review Committees and Institutional Review Committees were to include this minimum language in their respective Program and Institutional Requirements by June 2001. The definitions are available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3043418/.

ACGME = Accreditation Council for Graduate Medical Education.

These competencies should be interpreted, developed, and evaluated in the context of subspecialty training, recognizing that more basic competencies in these domains will or should have been acquired during residency training in internal medicine, a prerequisite for cardiovascular fellowship. Furthermore, maintenance of core competencies over the course of one's professional career is as important as initial competency acquisition.

The emphasis of COCATS is on Level I training—delineating competencies that all cardiology fellows must acquire during the standard fellowship that follows residency training in internal medicine. Level II training is defined for fields in which specific competencies can be undertaken during about 6 months of the 3-year training period (depending upon the career focus of trainees) and measured by a standardized qualifying instrument such as a subspecialty examination. Level II training is not available or described for fields lacking this criterion. Level III training is described only in broad terms to provide context for trainees and clarify that these advanced competencies are not covered during the general cardiology fellowship and require an additional period of training and designation by an independent accrediting board, often coupled with a certifying examination. The advanced training requirements required to achieve Level III competency will be addressed in subsequent, separately published clinical competence and advanced training statements. The Steering Committee and Task Forces recognize that implementation of these changes in training requirements will occur incrementally over time.

Level 1 Level 2 Level 3

Evaluation Tools: direct observation, in-training exam				
Patient Care and Procedural Skills	**12**	**24**	**36**	**Add**
1. Skill to select the appropriate imaging study.		I		
2. Skill to integrate perfusion imaging findings with clinical and other test results in the evaluation and management of patients.		I		
3. Skill to identify results that indicate a high-risk state.		I		
4. Skill to perform and interpret gated stress-rest perfusion study.			II	
5. Skill to perform and interpret a radionuclide ventriculography study.			II	
6. Skill to perform and interpret hybrid SPECT/CT and PET/CT imaging.				III
7. Skill to perform and quantify PET absolute myocardial blood flow and metabolism.				III
8. Skill to perform and interpret cardiac innervation, first pass, and planar studies.				III
Evaluation Tools: conference presentation, direct observation, logbook				
Systems-Based Practice	**12**	**24**	**36**	**Add**
1. Work effectively and efficiently with the nuclear laboratory staff.			II	
2. Incorporate risk/benefit and cost considerations in the use of radionuclide imaging techniques.			I	
3. Participate in laboratory quality monitoring and initiatives.			II	
Evaluation Tools: chart-stimulated recall, conference presentation, direct observation, multisource evaluation				
Practice-Based Learning and Improvement	**12**	**24**	**36**	**Add**
1. Identify knowledge and performance gaps and engage in opportunities to achieve focused education and performance improvement.			I	
Evaluation Tools: conference presentation, direct observation				
Professionalism	**12**	**24**	**36**	**Add**
1. Know and promote adherence to guidelines and appropriate use criteria.		I		
2. Interact respectfully with patients, families, and all members of the health care team- including ancillary and support staff.	I			
Evaluation Tools: chart-stimulated recall, conference presentation, direct observation				
Interpersonal and Communication Skills	**12**	**24**	**36**	**Add**
1. Communicate effectively and timely with patients, families, and referring physicians.		I	II	
2. Communicate test results in a comprehensive and user-friendly manner.			II	
Evaluation Tools: direct observation, multisource evaluation				

Add = additional months beyond the 3-year cardiovascular fellowship.

TRAINING BY MONTHS AND NUMBERS

Ryan T, et al
COCATS 4 Task Force 5: Echocardiography

Table 2. Summary of Training Requirements for Echocardiography

Level	Duration of Training* (Months)	Cumulative Duration** of Training (Months)	Minimal No. of TTE Exams Performed	Minimal No. of TTE Exams Interpreted	TEE and Special Procedures
I	3	3	75	150	Yes†
II	3	6	150 (75 Add)	300 (150 Add)	Yes‡
III	3	9	300 (150 Add)	750 (450 Add)	Yes

* Typical duration assuming acceptable progress toward milestones and demonstrated competency.
†Exposure to TEE and other special procedures.
‡Completion of Level II and additional special training are needed to achieve full competence in TEE and other special procedures.
Add = additional; TEE = transesophageal echocardiography; TTE = transthoracic echocardiography.

Questions