

1 **ACGME Program Requirements for Graduate Medical Education**
2 **in Medical Microbiology**
3

4 **Common Program Requirements are in BOLD**

5 *Proposed general requirements for all Pathology fellowships are in ITALICS*
6 *[for tracking during the revision process]*
7

8 Effective: July 2004
9

10 **Introduction**
11

12 **Int.A. Residency and fellowship programs are essential dimensions of the**
13 **transformation of the medical student to the independent practitioner along**
14 **the continuum of medical education. They are physically, emotionally, and**
15 **intellectually demanding, and require longitudinally-concentrated effort on**
16 **the part of the resident or fellow.**
17

18 **The specialty education of physicians to practice independently is**
19 **experiential, and necessarily occurs within the context of the health care**
20 **delivery system. Developing the skills, knowledge, and attitudes leading to**
21 **proficiency in all the domains of clinical competency requires the resident**
22 **and fellow physician to assume personal responsibility for the care of**
23 **individual patients. For the resident and fellow, the essential learning**
24 **activity is interaction with patients under the guidance and supervision of**
25 **faculty members who give value, context, and meaning to those**
26 **interactions. As residents and fellows gain experience and demonstrate**
27 **growth in their ability to care for patients, they assume roles that permit**
28 **them to exercise those skills with greater independence. This concept—**
29 **graded and progressive responsibility—is one of the core tenets of**
30 **American graduate medical education. Supervision in the setting of**
31 **graduate medical education has the goals of assuring the provision of safe**
32 **and effective care to the individual patient; assuring each resident's and**
33 **fellow's development of the skills, knowledge, and attitudes required to**
34 **enter the unsupervised practice of medicine; and establishing a foundation**
35 **for continued professional growth.**
36

37 ~~Int.A. Definition and Scope of the Subspecialty~~
38

39 ~~Int.B. Medical microbiology is athe subspecialty of pathology concerned primarily with~~
40 ~~the laboratory diagnosis, treatment, and control of infectious diseases.~~
41 ~~Practitioners of medical microbiology should be qualified to provide medical,~~
42 ~~scientific, and administrative direction of afor diagnostic microbiology~~
43 ~~laboratorieslaboratory; consultations as aphysician regarding the~~
44 ~~pathologic/microbiologic diagnosis of infectious diseases; and clinical~~
45 ~~consultations regarding ~~on~~the selection and interpretation of medical~~
46 ~~microbiology tests. In addition to these activities, medical microbiologists may be~~
47 ~~expected tomay direct the infection control program of a healthcare organization,~~
48 ~~and toparticipate on or direct an antibiotic formulary committee to optimize the~~
49 ~~wise use of antimicrobial agents and minimize the emergence of resistance~~
50 ~~toward these compounds. Training encompasses the pathophysiology of~~
51 ~~infectious diseases, the epidemiology of the spread of infectious microbes, and~~

52 the use of antimicrobial agents based on sound
53 pharmacokinetic/pharmacodynamic principles.

54

55 **Int.B.** ~~Duration and Scope of Education~~

56

57 Programs will be accredited to offer one year of graduate medical education in
58 medical microbiology following the completion of an ACGME-accredited
59 residency in Anatomic Pathology and Clinical Pathology, Anatomic Pathology, or
60 Clinical Pathology, or completion of an ACGME-accredited residency in another
61 primary medical specialty and completion of an ACGME-accredited fellowship in
62 infectious diseases.

63

64 **Int.C.** The educational program in medical microbiology must be 12 months in length.

65

66 **I. Institutions**

67

68 **I.A. Sponsoring Institution**

69

70 **One sponsoring institution must assume ultimate responsibility for the**
71 **program, as described in the Institutional Requirements, and this**
72 **responsibility extends to fellow assignments at all participating sites.**

73

74 **The sponsoring institution and the program must ensure that the program**
75 **director has sufficient protected time and financial support for his or her**
76 **educational and administrative responsibilities to the program.**

77

78 ~~The sponsoring institution should also sponsor an ACGME-accredited residency~~
79 ~~in anatomic and clinical pathology.~~

80

81 **I.B. Participating Sites**

82

83 **I.B.1. There must be a program letter of agreement (PLA) between the**
84 **program and each participating site providing a required**
85 **assignment. The PLA must be renewed at least every five years.**

86

87 **The PLA should:**

88

89 **I.B.1.a) identify the faculty who will assume both educational and**
90 **supervisory responsibilities for fellows;**

91

92 **I.B.1.b) specify their responsibilities for teaching, supervision, and**
93 **formal evaluation of fellows, as specified later in this**
94 **document;**

95

96 **I.B.1.c) specify the duration and content of the educational**
97 **experience; and,**

98

99 **I.B.1.d) state the policies and procedures that will govern fellow**
100 **education during the assignment.**

101

- 102 **I.B.2.** The program director must submit any additions or deletions of
103 participating sites routinely providing an educational experience,
104 required for all fellows, of one month full time equivalent (FTE) or
105 more through the Accreditation Council for Graduate Medical
106 Education (ACGME) Accreditation Data System (ADS).
107
- 108 **II. Program Personnel and Resources**
- 109
- 110 **II.A. Program Director**
- 111
- 112 **II.A.1.** There must be a single program director with authority and
113 accountability for the operation of the program. The sponsoring
114 institution's GMEC must approve a change in program director.
115 After approval, the program director must submit this change to the
116 ACGME via the ADS.
117
- 118 **II.A.2.** Qualifications of the program director must include:
- 119
- 120 **II.A.2.a)** requisite specialty expertise and documented educational
121 and administrative experience acceptable to the Review
122 Committee;
- 123
- 124 **II.A.2.b)** current certification in the subspecialty by the American
125 Board of Pathology (ABP), or subspecialty qualifications that
126 are acceptable to the Review Committee;
- 127
- 128 **II.A.2.b).(1)** A program director not currently certified in the
129 subspecialty by the ABP must be a physician certified in a
130 specialty by the American Board of Medical Specialties
131 (ABMS), or a subspecialty of anatomic and clinical
132 pathology, clinical pathology, or infectious diseases, and
133 either 1) be certified by the American Board of Medical
134 Microbiology or 2) have at least 10 years of active
135 participation as a specialist in medical microbiology
136 following completion of the most recent graduate medical
137 education program and be a recognized leader in the
138 subspecialty.
- 139
- 140 **II.A.2.c)** current medical licensure and appropriate medical staff
141 appointment; and,
- 142
- 143 ~~II.A.2.c).(1) appointment in good standing; the program director must~~
144 ~~be based at the primary teaching site;~~
- 145
- 146 **II.A.2.d)** *at least three years of active participation as a specialist in*
147 *medical microbiology following completion of the most recent*
148 *graduate medical education program.*
- 149
- 150 ~~II.A.2.e) licensure to practice medicine in the state where the sponsoring~~
151 ~~institution is located.~~

- 152
153 **II.A.3.** **The program director must administer and maintain an educational**
154 **environment conducive to educating the fellows in each of the**
155 **ACGME competency areas. The program director must:**
156
- 157 **II.A.3.a)** **prepare and submit all information required and requested by**
158 **the ACGME;**
159
- 160 **II.A.3.b)** **be familiar with and oversee compliance with ACGME and**
161 **Review Committee policies and procedures as outlined in the**
162 **ACGME Manual of Policies and Procedures;**
163
- 164 **II.A.3.c)** **obtain review and approval of the sponsoring institution’s**
165 **GMEC/DIO before submitting to the ACGME information or**
166 **requests for the following:**
167
- 168 **II.A.3.c).(1)** **all applications for ACGME accreditation of new**
169 **programs;**
170
- 171 **II.A.3.c).(2)** **changes in fellow complement;**
172
- 173 **II.A.3.c).(3)** **major changes in program structure or length of**
174 **training;**
175
- 176 **II.A.3.c).(4)** **progress reports requested by the Review Committee;**
177
- 178 **II.A.3.c).(5)** **responses to all proposed adverse actions;**
179
- 180 **II.A.3.c).(6)** **requests for increases or any change to fellow duty**
181 **hours;**
182
- 183 **II.A.3.c).(7)** **voluntary withdrawals of ACGME-accredited**
184 **programs;**
185
- 186 **II.A.3.c).(8)** **requests for appeal of an adverse action; and,**
187
- 188 **II.A.3.c).(9)** **appeal presentations to a Board of Appeal or the**
189 **ACGME.**
190
- 191 **II.A.3.d)** **obtain DIO review and co-signature on all program**
192 **information forms, as well as any correspondence or**
193 **document submitted to the ACGME that addresses:**
194
- 195 **II.A.3.d).(1)** **program citations, and/or**
196
- 197 **II.A.3.d).(2)** **request for changes in the program that would have**
198 **significant impact, including financial, on the program**
199 **or institution.**
200
- 201 **II.A.3.e)** **prepare and implement a supervision policy that specifies fellow**

- 202 *and faculty lines of responsibility; and,*
203
204 II.A.3.f) devote at least 35% of his or her time to clinical work with fellows,
205 teaching, and fellowship-related administration.
206
207 II.A.3.g) ensure that fellows participate in medical microbiology
208 conferences, journal clubs and rounds, teaching, and scholarly
209 activity;
210
211 **II.B. Faculty**
212
213 **II.B.1. There must be a sufficient number of faculty with documented**
214 **qualifications to instruct and supervise all fellows.**
215
216 II.B.1.a) *If the program director is not certified, the teaching staff must*
217 *include at least one faculty member certified by the American*
218 *Board of Pathology in medical microbiology.*
219
220 **II.B.2. The faculty must devote sufficient time to the educational program**
221 **to fulfill their supervisory and teaching responsibilities and**
222 **demonstrate a strong interest in the education of fellows.**
223
224 II.B.2.a) The faculty must, in aggregate, devote at least 20 hours per week
225 to fellowship-related clinical work and teaching.
226
227 **II.B.3. The physician faculty must have current certification in the**
228 **subspecialty by the American Board of Pathology, or possess**
229 **qualifications acceptable to the Review Committee.**
230
231 **II.B.4. The physician faculty must possess current medical licensure and**
232 **appropriate medical staff appointment.**
233
234 **II.C. Other Program Personnel**
235
236 **The institution and the program must jointly ensure the availability of all**
237 **necessary professional, technical, and clerical personnel for the effective**
238 **administration of the program.**
239
240 II.C.1. There must be secretarial and laboratory technical personnel to support
241 the clinical, teaching, educational, and research activities of the
242 fellowship.
243
244 **II.D. Resources**
245
246 **The institution and the program must jointly ensure the availability of**
247 **adequate resources for fellow education, as defined in the specialty**
248 **program requirements.**
249
250 II.D.1. There must be office space, meeting rooms, and laboratory space to
251 support teaching, educational, and research activities.

- 252
253 II.D.2. Clinical material related to the subspecialty area of the fellowship must be
254 provided.
255
- 256 II.D.2.a) Clinical material must be indexed so as to permit retrieval of
257 archived records by specified organ and/or diagnosis in a timely
258 manner.
259
- 260 II.D.2.b) Laboratories should be equipped to perform all tests required for
261 the education of fellows.
262
- 263 ~~II.D.3. Sponsoring institutions must provide the necessary clinical material and~~
264 ~~analytical capability in medical microbiology to support experience at a~~
265 ~~sufficient level for the fellow to acquire the competency of a specialist in~~
266 ~~medical microbiology.~~
267
- 268 ~~II.D.4. Medical microbiology fellows must have access to reference laboratories~~
269 ~~for training in specialized procedures not available in laboratories in the~~
270 ~~sponsoring institution.~~
271
- 272 ~~II.D.5. The laboratories in all participating sites should have adequate and~~
273 ~~modern equipment and facilities, sufficient personnel, and appropriate~~
274 ~~policies and procedures for the performance of all laboratory aspects of~~
275 ~~medical microbiology, epidemiology, and infectious diseases.~~
276
- 277 **II.E. Medical Information Access**
278
- 279 **Fellows must have ready access to specialty-specific and other appropriate**
280 **reference material in print or electronic format. Electronic medical literature**
281 **databases with search capabilities should be available.**
282
- 283 **III. Fellow Appointments**
284
- 285 **III.A. Eligibility Criteria**
286
- 287 **Each fellow must successfully complete an ACGME-accredited specialty**
288 **program and/or meet other eligibility criteria as specified by the Review**
289 **Committee. The program must document that each fellow has met the**
290 **eligibility criteria.**
291
- 292 *III.A.1. To be eligible, fellows should have completed an ACGME-accredited*
293 *residency in Anatomic Pathology and Clinical Pathology, Anatomic*
294 *Pathology, or Clinical Pathology, an ACGME-accredited residency in*
295 *another primary medical specialty, or an ACGME-accredited fellowship in*
296 *infectious diseases. Prior to appointment in the program, fellows must*
297 *have completed one of the following: a residency in anatomic pathology*
298 *and clinical pathology accredited by the ACGME or the Royal College of*
299 *Physicians and Surgeons of Canada (RCPSC); certification in anatomic*
300 *pathology, or clinical pathology; or an ACGME-accredited residency*
301 *program in a primary medical specialty, or an ACGME-accredited*
302 *fellowship in infectious diseases.*

303
304 **III.B. Number of Fellows**
305
306 **The program director may not appoint more fellows than approved by the**
307 **Review Committee, unless otherwise stated in the specialty-specific**
308 **requirements. The program’s educational resources must be adequate to**
309 **support the number of fellows appointed to the program.**
310
311 III.B.1. The education of other learners must not dilute the educational
312 experience of the program’s fellows.
313
314 **IV. Educational Program**
315
316 **IV.A. The curriculum must contain the following educational components:**
317
318 **IV.A.1. Skills and competencies the fellow will be able to demonstrate at the**
319 **conclusion of the program. The program must distribute these skills**
320 **and competencies to fellows and faculty annually, in either written**
321 **or electronic form. These skills and competencies should be**
322 **reviewed by the fellow at the start of each rotation;**
323
324 **IV.A.2. ACGME Competencies**
325
326 **The program must integrate the following ACGME competencies**
327 **into the curriculum:**
328
329 **IV.A.2.a) Patient Care**
330
331 **Fellows must be able to provide patient care that is**
332 **compassionate, appropriate, and effective for the treatment of**
333 **health problems and the promotion of health. Fellows:**
334
335 IV.A.2.a).(1) must demonstrate competence in performing procedures,
336 including:
337
338 IV.A.2.a).(1).(a) ~~must develop knowledge and skills related to the~~
339 ~~specimen selection, collection, and transport of~~
340 ~~specimens, processing of specimens;~~
341
342 IV.A.2.a).(1).(b) ~~must perform and interpret all relevant forms of~~
343 ~~direct microscopic examination of clinical materials,~~
344 ~~e.g., including light and fluorescence and electron~~
345 ~~microscopy, for the morphologic diagnosis of~~
346 ~~infectious diseases; in clinical materials (e.g., direct~~
347 ~~microscopy of stained smears, cytologic~~
348 ~~preparations, and tissue sections); and,~~
349
350 IV.A.2.a).(1).(c) culture examination of cultures using biochemical
351 immunologic and molecular techniques for
352 identification of microorganisms by all appropriate

353 methodologies (including morphologic,
354 immunologic, and molecular techniques),
355 supplemented with stock cultures of infrequently
356 encountered and medically important
357 microorganisms, microscopic slides, photographs
358 and seminar material.

359
360 IV.A.2.a).(2) must demonstrate competence in:

361
362 IV.A.2.a).(2).(a) interpreting results of assays performed in the
363 medical microbiology laboratory, including
364 antimicrobial susceptibility tests and molecular
365 diagnostic tests; and,

366
367 IV.A.2.a).(2).(b) should observe patients of all ages with a wide
368 variety of infectious diseases through interaction
369 with physicians from other clinical services;

370
371 IV.A.2.a).(2).(c) must provide medical, scientific, and administrative
372 direction in a diagnostic microbiology laboratory;

373
374 IV.A.2.a).(2).(d) must interpret and correlate interpreting and
375 correlating the clinical status of a patient with the
376 results of medical microbiology testing, including
377 the implications of both negative and positive test
378 results

379
380 IV.A.2.a).(3) must use immunological and molecular methods to aid in
381 the detection and identification of microorganisms and their
382 virulence factors;

383
384 IV.A.2.a).(4) must demonstrate a satisfactory level of diagnostic
385 competence and the ability to provide appropriate and
386 effective consultation in the context of pathology services;

387
388 IV.A.2.a).(5) must have experience and competence in the
389 interpretation of laboratory data as part of patient care
390 decision making and patient care consultation..

391
392 **IV.A.2.b) Medical Knowledge**

393
394 **Fellows must demonstrate knowledge of established and**
395 **evolving biomedical, clinical, epidemiological and social-**
396 **behavioral sciences, as well as the application of this**
397 **knowledge to patient care. Fellows:**

398
399 IV.A.2.b).(1) Should must demonstrate expertise in their knowledge of:
400 have instruction including, but not be limited to

401
402 IV.A.2.b).(1).(a) medical bacteriology, including mycobacteriology,
403 mycology, virology, parasitology, immunology,

404 molecular testing related to infectious diseases,
405 public health microbiology (including epidemiologic
406 typing as related to infection control), and
407 antimicrobial susceptibility testing; and,
408
409 IV.A.2.b).(1).(b) ~~should have in depth knowledge of specimen~~
410 ~~collection, transport and processing, microscopic~~
411 ~~examination of specimens, histopathologic and~~
412 clinical correlation of microbiologic data, activity
413 and pharmacokinetics of antimicrobial agents, and
414 principles and interpretation of antimicrobial
415 susceptibility testing and antimicrobial assays.
416
417 IV.A.2.b).(2) must demonstrate expertise in their knowledge of:
418
419 IV.A.2.b).(2).(a) ~~must develop knowledge and skills relating to~~
420 principles of disinfection and sterilization, hospital
421 infection control, ~~infection control committee~~
422 ~~functions and responsibilities, microbiologic safety,~~
423 laboratory safety, quality control, workload
424 accounting, budgeting, personnel supervision, and
425 epidemiology as related to the hospital and public
426 health issues;
427
428 IV.A.2.b).(2).(b) the role of the microbiology laboratory in the
429 context of the hospital health care system and
430 community medicine, including:
431
432 IV.A.2.b).(2).(b).(i) infection control methods to prevent the
433 spread of antimicrobial resistant
434 microorganisms throughout the hospital and
435 the health care system;
436
437 IV.A.2.b).(2).(b).(ii) interactions of the medical microbiology
438 laboratory with the public health system for
439 the detection and submission of
440 microorganisms so as to aid in the
441 containment of infectious diseases; and,
442
443 IV.A.2.b).(2).(b).(iii) public health implications of specific
444 microorganisms and means for their control.
445
446 IV.A.2.b).(2).(b).(iii).(a) For tests sent to a reference
447 laboratory facility, the fellow should
448 understand the methods used to
449 perform the assays and the
450 interpretation of test results.

452 **IV.A.2.c)**

Practice-based Learning and Improvement

453 **Fellows are expected to develop skills and habits to be able**
454

455		to meet the following goals:
456		
457	IV.A.2.c).(1)	systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;
458		
459		
460		
461	IV.A.2.c).(2)	locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems; and,
462		
463		
464		
465	IV.A.2.c).(3)	participate in decisions that affect communicable disease prevention and epidemiology;
466		
467		
468	IV.A.2.c).(4)	independently evaluate and solve problem situations identified by the medical and laboratory staff relating to medical microbiology, infectious diseases, and epidemiology.
469		
470		
471		
472		
473	IV.A.2.d)	Interpersonal and Communication Skills
474		
475		Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
476		
477		
478		
479		
480	IV.A.2.d).(1)	<u>Fellows must demonstrate competence in providing appropriate and effective consultations to other physicians and health professionals, both intra- and inter-departmental.</u>
481		
482		
483		
484		
485	IV.A.2.d).(1).(a)	<u>Consultations should include providing medical advice on the diagnosis, treatment, and control of infectious diseases.</u>
486		
487		
488		
489	IV.A.2.d).(2)	Fellows must <u>demonstrate competence in educating trainees</u> others in <u>the knowledge, skills and abilities related to</u> medical microbiology.
490		
491		
492		
493	IV.A.2.e)	Professionalism
494		
495		Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.
496		
497		
498		
499	IV.A.2.e).(1)	<u>Fellows must interact professionally when communicating with clinicians regarding inappropriate and rejected specimens, and requests for inappropriate testing.</u>
500		
501		
502		
503	IV.A.2.f)	Systems-based Practice
504		

505 **Fellows must demonstrate an awareness of and**
506 **responsiveness to the larger context and system of health**
507 **care, as well as the ability to call effectively on other**
508 **resources in the system to provide optimal health care.**

509
510 IV.A.2.f).(1) Fellows must participate in institution-wide financial and/or
511 operational decisions relating to the diagnosis,
512 management, treatment, ~~and control,~~ and prevention of
513 infectious diseases.

514
515 ~~IV.A.2.f).(2) Fellows must assess/recognize the public health~~
516 ~~implications of specific microorganisms, and means for~~
517 ~~their control.~~

518
519 IV.A.3. Curriculum Organization and Fellow Experiences

520
521 IV.A.3.a) Fellows must have structured instruction and experience in the
522 administration, management, and direction of a medical
523 microbiology laboratory, including quality assurance, safety
524 regulations, and ~~the~~ use of laboratory and hospital information
525 systems.

526
527 IV.A.3.b) Fellows must have experiences providing medical, scientific, and
528 administrative direction in the diagnostic microbiology laboratory.

529
530 IV.A.3.c) Fellows' clinical experience should be augmented through didactic
531 sessions, review of the medical literature in the subspecialty area,
532 and use of study sets of unusual cases.

533
534 IV.A.3.d) The didactic curriculum must include teaching conferences in
535 medical microbiology, journal clubs, and joint conferences with the
536 Pathology Department, as well as with clinical services involved in
537 the diagnosis and management of patient care utilizing medical
538 microbiology.

539
540 IV.A.3.d).(1) Fellows should participate in conferences, on average, at
541 least once per month, and should give a minimum of two
542 presentations per year.

543
544 IV.A.3.d).(2) ~~Ensure that the program provides regular administrative~~
545 ~~meeting, seminars, and conferences in~~ Didactic topics
546 must include medical microbiology, the infectious disease
547 aspects of pathology, and the clinical and epidemiologic
548 aspects of infectious diseases,
549

550 **IV.B. Fellows' Scholarly Activities**

551
552 IV.B.1. Each fellow should participate in scholarly activity, including at least one
553 of the following:

554
555 IV.B.1.a) research;

556		
557	IV.B.1.b)	<u>evidence-based presentations at journal club or meetings (local,</u>
558		<u>regional, or national); or,</u>
559		
560	IV.B.1.c)	<u>preparation/submission of articles for peer-reviewed publications.</u>
561		
562	IV.B.2.	<u>Each fellow must participate in</u> undertake <u>research and development of</u>
563		<u>new testing methods for medical microbiology, infectious diseases, and/or</u>
564		<u>epidemiology.</u>
565		
566	V.	Evaluation
567		
568	V.A.	Fellow Evaluation
569		
570	V.A.1.	Formative Evaluation
571		
572	V.A.1.a)	The faculty must evaluate fellow performance in a timely
573		manner.
574		
575	V.A.1.a).(1)	<u>Faculty must evaluate fellow performance at least twice</u>
576		<u>per year.</u>
577		
578	V.A.1.b)	The program must:
579		
580	V.A.1.b).(1)	provide objective assessments of competence in
581		patient care, medical knowledge, practice-based
582		learning and improvement, interpersonal and
583		communication skills, professionalism, and systems-
584		based practice;
585		
586	V.A.1.b).(2)	use multiple evaluators (e.g., faculty, peers, patients,
587		self, and other professional staff); and,
588		
589	V.A.1.b).(3)	provide each fellow with documented semiannual
590		evaluation of performance with feedback.
591		
592	V.A.1.c)	The evaluations of fellow performance must be accessible for
593		review by the fellow, in accordance with institutional policy.
594		
595	V.A.2.	Summative Evaluation
596		
597		The program director must provide a summative evaluation for each
598		fellow upon completion of the program. This evaluation must
599		become part of the fellow's permanent record maintained by the
600		institution, and must be accessible for review by the fellow in
601		accordance with institutional policy. This evaluation must:
602		
603	V.A.2.a)	document the fellow's performance during their education,
604		and
605		

- 606 V.A.2.b) verify that the fellow has demonstrated sufficient competence
607 to enter practice without direct supervision.
608
- 609 V.B. Faculty Evaluation
610
- 611 V.B.1. At least annually, the program must evaluate faculty performance as
612 it relates to the educational program.
613
- 614 V.B.2. These evaluations should include a review of the faculty's clinical
615 teaching abilities, commitment to the educational program, clinical
616 knowledge, professionalism, and scholarly activities.
617
- 618 V.C. Program Evaluation and Improvement
619
- 620 V.C.1. The program must document formal, systematic evaluation of the
621 curriculum at least annually. The program must monitor and track
622 each of the following areas:
623
- 624 V.C.1.a) fellow performance, and
625
- 626 V.C.1.b) faculty development
627
- 628 V.C.2. If deficiencies are found, the program should prepare a written plan
629 of action to document initiatives to improve performance in the
630 areas listed in section V.C.1. The action plan should be reviewed
631 and approved by the teaching faculty and documented in meeting
632 minutes.
633
- 634 V.C.3. 60 percent of the program's graduates from the preceding five years
635 taking the ABP certifying examination for medical microbiology for the first
636 time must pass.
637
- 638 VI. Fellow Duty Hours in the Learning and Working Environment
639
- 640 VI.A. Professionalism, Personal Responsibility, and Patient Safety
641
- 642 VI.A.1. Programs and sponsoring institutions must educate fellows and
643 faculty members concerning the professional responsibilities of
644 physicians to appear for duty appropriately rested and fit to provide
645 the services required by their patients.
646
- 647 VI.A.2. The program must be committed to and responsible for promoting
648 patient safety and fellow well-being in a supportive educational
649 environment.
650
- 651 VI.A.3. The program director must ensure that fellows are integrated and
652 actively participate in interdisciplinary clinical quality improvement
653 and patient safety programs.
654
- 655 VI.A.4. The learning objectives of the program must:

- 656
657 **VI.A.4.a)** be accomplished through an appropriate blend of supervised
658 patient care responsibilities, clinical teaching, and didactic
659 educational events; and,
660
- 661 **VI.A.4.b)** not be compromised by excessive reliance on fellows to fulfill
662 non-physician service obligations.
663
- 664 **VI.A.5.** The program director and sponsoring institution must ensure a
665 culture of professionalism that supports patient safety and personal
666 responsibility. Fellows and faculty members must demonstrate an
667 understanding and acceptance of their personal role in the
668 following:
669
- 670 **VI.A.5.a)** assurance of the safety and welfare of patients entrusted to
671 their care;
672
- 673 **VI.A.5.b)** provision of patient- and family-centered care;
674
- 675 **VI.A.5.c)** assurance of their fitness for duty;
676
- 677 **VI.A.5.d)** management of their time before, during, and after clinical
678 assignments;
679
- 680 **VI.A.5.e)** recognition of impairment, including illness and fatigue, in
681 themselves and in their peers;
682
- 683 **VI.A.5.f)** attention to lifelong learning;
684
- 685 **VI.A.5.g)** the monitoring of their patient care performance improvement
686 indicators; and,
687
- 688 **VI.A.5.h)** honest and accurate reporting of duty hours, patient
689 outcomes, and clinical experience data.
690
- 691 **VI.A.6.** All fellows and faculty members must demonstrate responsiveness
692 to patient needs that supersedes self-interest. Physicians must
693 recognize that under certain circumstances, the best interests of the
694 patient may be served by transitioning that patient's care to another
695 qualified and rested provider.
696
- 697 **VI.B.** Transitions of Care
698
- 699 **VI.B.1.** Programs must design clinical assignments to minimize the number
700 of transitions in patient care.
701
- 702 **VI.B.2.** Sponsoring institutions and programs must ensure and monitor
703 effective, structured hand-over processes to facilitate both
704 continuity of care and patient safety.
705

- 706 **VI.B.3.** Programs must ensure that fellows are competent in communicating
707 with team members in the hand-over process.
708
- 709 **VI.B.4.** The sponsoring institution must ensure the availability of schedules
710 that inform all members of the health care team of attending
711 physicians and fellows currently responsible for each patient's care.
712
- 713 **VI.C.** Alertness Management/Fatigue Mitigation
714
- 715 **VI.C.1.** The program must:
716
- 717 **VI.C.1.a)** educate all faculty members and fellows to recognize the
718 signs of fatigue and sleep deprivation;
719
- 720 **VI.C.1.b)** educate all faculty members and fellows in alertness
721 management and fatigue mitigation processes; and,
722
- 723 **VI.C.1.c)** adopt fatigue mitigation processes to manage the potential
724 negative effects of fatigue on patient care and learning, such
725 as naps or back-up call schedules.
726
- 727 **VI.C.2.** Each program must have a process to ensure continuity of patient
728 care in the event that a fellow may be unable to perform his/her
729 patient care duties.
730
- 731 **VI.C.3.** The sponsoring institution must provide adequate sleep facilities
732 and/or safe transportation options for fellows who may be too
733 fatigued to safely return home.
734
- 735 **VI.D.** Supervision of Fellows
736
- 737 **VI.D.1.** In the clinical learning environment, each patient must have an
738 identifiable, appropriately-credentialed and privileged attending
739 physician (or licensed independent practitioner as approved by each
740 Review Committee) who is ultimately responsible for that patient's
741 care.
742
- 743 **VI.D.1.a)** This information should be available to fellows, faculty
744 members, and patients.
745
- 746 **VI.D.1.b)** Fellows and faculty members should inform patients of their
747 respective roles in each patient's care.
748
- 749 **VI.D.2.** The program must demonstrate that the appropriate level of
750 supervision is in place for all fellows who care for patients.
751
- 752 Supervision may be exercised through a variety of methods. Some
753 activities require the physical presence of the supervising faculty
754 member. For many aspects of patient care, the supervising
755 physician may be a more advanced fellow. Other portions of care

756 provided by the fellow can be adequately supervised by the
757 immediate availability of the supervising faculty member or fellow
758 physician, either in the institution, or by means of telephonic and/or
759 electronic modalities. In some circumstances, supervision may
760 include post-hoc review of fellow-delivered care with feedback as to
761 the appropriateness of that care.

762
763 **VI.D.3. Levels of Supervision**

764
765 To ensure oversight of fellow supervision and graded authority and
766 responsibility, the program must use the following classification of
767 supervision:

768
769 **VI.D.3.a) Direct Supervision – the supervising physician is physically
770 present with the fellow and patient.**

771
772 **VI.D.3.b) Indirect Supervision:**

773
774 **VI.D.3.b).(1) with direct supervision immediately available – the
775 supervising physician is physically within the hospital
776 or other site of patient care, and is immediately
777 available to provide Direct Supervision.**

778
779 **VI.D.3.b).(2) with direct supervision available – the supervising
780 physician is not physically present within the hospital
781 or other site of patient care, but is immediately
782 available by means of telephonic and/or electronic
783 modalities, and is available to provide Direct
784 Supervision.**

785
786 **VI.D.3.c) Oversight – the supervising physician is available to provide
787 review of procedures/encounters with feedback provided
788 after care is delivered.**

789
790 **VI.D.4. The privilege of progressive authority and responsibility, conditional
791 independence, and a supervisory role in patient care delegated to
792 each fellow must be assigned by the program director and faculty
793 members.**

794
795 **VI.D.4.a) The program director must evaluate each fellow’s abilities
796 based on specific criteria. When available, evaluation should
797 be guided by specific national standards-based criteria.**

798
799 **VI.D.4.b) Faculty members functioning as supervising physicians
800 should delegate portions of care to fellows, based on the
801 needs of the patient and the skills of the fellows.**

802
803 **VI.D.4.c) Fellows should serve in a supervisory role of residents or
804 junior fellows in recognition of their progress toward
805 independence, based on the needs of each patient and the**

806 skills of the individual fellow.
807
808 **VI.D.5. Programs must set guidelines for circumstances and events in**
809 **which fellows must communicate with appropriate supervising**
810 **faculty members, such as the transfer of a patient to an intensive**
811 **care unit, or end-of-life decisions.**
812
813 **VI.D.5.a) Each fellow must know the limits of his/her scope of**
814 **authority, and the circumstances under which he/she is**
815 **permitted to act with conditional independence.**
816
817 **VI.D.6. Faculty supervision assignments should be of sufficient duration to**
818 **assess the knowledge and skills of each fellow and delegate to**
819 **him/her the appropriate level of patient care authority and**
820 **responsibility.**
821
822 **VI.E. Clinical Responsibilities**
823
824 **The clinical responsibilities for each fellow must be based on PGY-level,**
825 **patient safety, fellow education, severity and complexity of patient**
826 **illness/condition and available support services.**
827
828 *[Optimal clinical workload will be further specified by each Review Committee.]*
829
830 **VI.F. Teamwork**
831
832 **Fellows must care for patients in an environment that maximizes effective**
833 **communication. This must include the opportunity to work as a member of**
834 **effective interprofessional teams that are appropriate to the delivery of care**
835 **in the specialty.**
836
837 *[Each Review Committee will define the elements that must be present in each*
838 *specialty.]*
839
840 **VI.G. Fellow Duty Hours**
841
842 **VI.G.1. Maximum Hours of Work per Week**
843
844 **Duty hours must be limited to 80 hours per week, averaged over a**
845 **four-week period, inclusive of all in-house call activities and all**
846 **moonlighting.**
847
848 **VI.G.1.a) Duty Hour Exceptions**
849
850 **A Review Committee may grant exceptions for up to 10% or a**
851 **maximum of 88 hours to individual programs based on a**
852 **sound educational rationale.**
853
854 **VI.G.1.a).(1) In preparing a request for an exception the program**
855 **director must follow the duty hour exception policy**

856 from the ACGME Manual on Policies and Procedures.
857
858 **VI.G.1.a).(2)** Prior to submitting the request to the Review
859 Committee, the program director must obtain approval
860 of the institution's GMEC and DIO.
861
862 **VI.G.2.** **Moonlighting**
863
864 **VI.G.2.a)** Moonlighting must not interfere with the ability of the fellow
865 to achieve the goals and objectives of the educational
866 program.
867
868 **VI.G.2.b)** Time spent by fellows in Internal and External Moonlighting
869 (as defined in the ACGME Glossary of Terms) must be
870 counted towards the 80-hour Maximum Weekly Hour Limit.
871
872 **VI.G.3.** **Mandatory Time Free of Duty**
873
874 Fellows must be scheduled for a minimum of one day free of duty
875 every week (when averaged over four weeks). At-home call cannot
876 be assigned on these free days.
877
878 **VI.G.4.** **Maximum Duty Period Length**
879
880 Duty periods of fellows may be scheduled to a maximum of 24 hours
881 of continuous duty in the hospital. Programs must encourage
882 fellows to use alertness management strategies in the context of
883 patient care responsibilities. Strategic napping, especially after 16
884 hours of continuous duty and between the hours of 10:00 p.m. and
885 8:00 a.m., is strongly suggested.
886
887 **VI.G.4.a)** It is essential for patient safety and fellow education that
888 effective transitions in care occur. Fellows may be allowed to
889 remain on-site in order to accomplish these tasks; however,
890 this period of time must be no longer than an additional four
891 hours.
892
893 **VI.G.4.b)** Fellows must not be assigned additional clinical
894 responsibilities after 24 hours of continuous in-house duty.
895
896 **VI.G.4.c)** In unusual circumstances, fellows, on their own initiative,
897 may remain beyond their scheduled period of duty to
898 continue to provide care to a single patient. Justifications for
899 such extensions of duty are limited to reasons of required
900 continuity for a severely ill or unstable patient, academic
901 importance of the events transpiring, or humanistic attention
902 to the needs of a patient or family.
903
904 **VI.G.4.c).(1)** Under those circumstances, the fellow must:
905

906	VI.G.4.c).(1).(a)	appropriately hand over the care of all other patients to the team responsible for their continuing care; and,
907		
908		
909		
910	VI.G.4.c).(1).(b)	document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director.
911		
912		
913		
914		
915	VI.G.4.c).(2)	The program director must review each submission of additional service, and track both individual fellow and program-wide episodes of additional duty.
916		
917		
918		
919	VI.G.5.	Minimum Time Off between Scheduled Duty Periods
920		
921	VI.G.5.a)	Fellows in the final years of education <i>[as defined by the Review Committee]</i> must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.
922		
923		
924		
925		
926	VI.G.5.a).(1)	This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in-seven standards. While it is desirable that fellows in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances <i>[as defined by the Review Committee]</i> when these fellows must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty.
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936	VI.G.5.a).(1).(a)	Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by fellows in their final years of education must be monitored by the program director.
937		
938		
939		
940		
941		
942	VI.G.6.	Maximum Frequency of In-House Night Float
943		
944		Fellows must not be scheduled for more than six consecutive nights of night float.
945		
946		
947		<i>[The maximum number of consecutive weeks of night float, and maximum number of months of night float per year may be further specified by the Review Committee.]</i>
948		
949		
950		
951	VI.G.7.	Maximum In-House On-Call Frequency
952		
953		Fellows must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).
954		
955		

956 **VI.G.8. At-Home Call**
957
958 **VI.G.8.a)** Time spent in the hospital by fellows on at-home call must
959 count towards the 80-hour maximum weekly hour limit. The
960 frequency of at-home call is not subject to the every-third-
961 night limitation, but must satisfy the requirement for one-day-
962 in-seven free of duty, when averaged over four weeks.
963
964 **VI.G.8.a).(1)** At-home call must not be so frequent or taxing as to
965 preclude rest or reasonable personal time for each
966 fellow.
967
968 **VI.G.8.b)** Fellows are permitted to return to the hospital while on at-
969 home call to care for new or established patients. Each
970 episode of this type of care, while it must be included in the
971 80-hour weekly maximum, will not initiate a new “off-duty
972 period”.
973
974 ***