

# **PULMONARY - CRITICAL CARE FELLOWSHIP PROGRAMS**

## **FREQUENTLY ASKED QUESTIONS**

The Residency Review Committee for Internal Medicine has answered the following questions from pulmonary/ critical care fellowship programs. The answers provided represent a summary of the actions previously taken by the Committee. You should not interpret the answers as a second set of standards. The RRC-IM provides these answers to give training programs insight on how the peer review process works. Each program reviewed is unique. The RRC-IM interprets substantial compliance with the Program Requirements that reflect the unique composite of a given program. The Requirements are as stated.

### **Abbreviations Used**

PR = Program Requirement  
PD = Program Director  
APD = Associate Program Director  
Sub = Internal Medicine subspecialty program  
Sub-sub = Subspecialty requiring completion of training in a parent subspecialty (i.e., clinical cardiac electrophysiology, interventional cardiology, transplant hepatology)  
RRC-IM = Residency Review Committee for Internal Medicine  
ACGME = Accreditation council of Graduate Medical Education  
DIO = Designated Institutional Official (usually serves as chair of GMEC)  
GMEC = Graduate Medical Education Committee, as required by the IRC  
IRC = Institutional Review Committee  
PIF = Program Information Form  
KCF = Key Clinical Faculty  
Pub = Peer-reviewed publication or other acceptable product of scholarship as defined by the RRC-IM  
Pulm = Pulmonary  
Pulm-CC = Pulmonary-critical care  
CC = Critical care

### **Section I-VII General Subspecialty Program Requirements**

#### **General Subspecialty vs. Pulm-CC Requirements**

##### Question:

*“Do the General Subspecialty Program Requirements apply to pulmonary-critical care?”*

##### Program Requirements:

For Sections I. through VIII., see:

- **ACGME Program Requirements for Fellowship Education in the Subspecialties of Internal Medicine**
- **RRC-IM Web Subspecialty FAQ**

##### Answer:

Absolutely

Pulmonary-critical care PDs should study carefully the General Subspecialty Program Requirements, and the FAQs related to these PRs. The requirements cover required structural elements in the program such as required institutional support, facilities and resources, key faculty and PD qualifications and responsibilities, conferences, continuity clinic, scholarship and research, evaluation, etc.

Subspecialty fellowship programs are expected to be in full compliance with both the General Subspecialty Program Requirements, and the Subspecialty Specific Program Requirements.

## **Section VIII - XI Pulmonary-Critical Care Program Requirements**

### **Section VIII. Educational Program**

#### **Mono-Specialty Training**

##### Question:

*“Can we offer a Pulmonary or a Critical Care Medicine track in the Pulm-CCM program?”*

##### Program Requirement:

A combined subspecialty educational program in pulmonary disease and critical care medicine must be organized to provide training and supervised experience at a level sufficient for the fellow to acquire the competency of a specialist in both disciplines. (Educational Program, Section VIII.A.)

The combined training program must be 3 years in duration and all of the educational experiences and program content explicitly required for a training program in each area must be present in the combined program. (Educational Program, Section VIII.B.)

##### Answer:

Yes

A three-year combined subspecialty training program in pulmonary disease and critical care medicine can provide two-year training in either pulmonary diseases or critical care medicine (or 1-year training in critical care for fellows who have completed an ACGME-accredited IM fellowship) by developing a curriculum and rotation schedule that meets the published program requirements for the specialty training, as stated in the Program Requirements for Fellowship Education in Pulmonary Diseases and Program Requirements for Fellowship Education in Critical Care Medicine.

- If the endeavor is to be a routine track (i.e., 2 or more fellows in 3 years), the program director must submit the didactic and rotation schedules and narrative that describes the educational and clinical experience for the track(s) to the RRC-IM for approval.
- If the accommodation is only for individual fellows on request (i.e., one fellow every 3 years), then RRC approval of the curriculum is not required.

At all times, programs must stay within their approved complement.

- Programs must request a temporary complement increase (via Web ADS) if the addition of a pulmonary or critical care fellow will cause the program to exceed their approved complement.
- The RRC-IM will grant temporary increases to accommodate additional critical care or pulmonary medicine trainees. If it becomes more than occasional (i.e., one fellow every 3 years), then the program should request a permanent complement increase and have the pulmonary or critical care track approved.

#### **Continuity Clinic while on ICU**

##### Question:

*“Can Fellows be excused from continuity clinic during ICU rotations?”*

##### Program Requirement:

Fellows must have continuity care clinic experience throughout the length of the training program. (Educational Program, Section VIII.C.3.)

Fellows may be excused from their continuity care clinic experience while on critical care rotations. (Educational Program, Section VIII.C.3.b)

Answer:

The RRC-IM recognizes that fellows assigned to the medical intensive care unit may not be able to attend continuity clinic because of the unique needs for patient care and resident supervision in this high acuity environment. However, the RRC-IM did not intend that fellows be excused from clinic for the maximum critical care time (15 months), during away rotations (up to 1 month per year), and during vacation (up to 1 month per year) so that the fellow would not attend continuity clinic for more than half of the accredited training. In addition, the RRC-IM considers 6 month blocks to be the minimum duration of a clinic, and blocks must be lengthened accordingly when fellows are excused from clinic.

RRC-IM Committee Standard March 2007

- Programs must limit excused time from continuity clinic in Pulm-CCM to 12 months in 3 years, while assigned to
  - The 6 months of required MICU rotations
  - Other critical care rotations
  - Away rotations up to 4 weeks per year
  - Does NOT include vacation time
- Blocks of clinic should be at least 6 continuous months in duration.
  - When blocks are interrupted by critical care or away rotations (so that the amount of time in the block is less than 6 months), then the continuity clinic block must be extended so that there is at least a 6 month experience.
  - Thus, programs must schedule at least 24 months continuity clinic for each fellow.

Some programs have fellows attend 1-2 clinics per month, or attend abbreviated clinics, while on critical care rotations to maintain continuity with their patient panel.

Programs may be commended for this optional “best practice.”

## **Duration of Clinical Training**

### **ICU training**

Question:

*“How should we ‘count’ rotations that are split between pulmonary and critical care?”*

*“What ‘counts’ as medical and non-medical ICU?”*

Program Requirement:

18 Months Clinical/ 9 months Pulmonary

The program must, however, provide 18 months of clinical training which includes at least 9 months of meaningful patient care responsibility for inpatients and outpatients with a wide variety of pulmonary disease. There should be an educational emphasis on pulmonary physiology and its correlation with clinical disorders. (Educational Program, Section VIII.C.1.)

9 months CC/ 6 Months Medical ICU

[The program must, however, provide 18 months of clinical training] which includes at least 9 months of clinical training in critical care medicine of which at least 6 months must be devoted to the care of critically ill medical patients (i.e., MICU/CICU or equivalent). (Educational Program, Section VIII.C.2.a))

3 Months Non-Medical ICU

[The program must, however, provide 18 months of clinical training which includes at least 9 months of clinical training in critical care medicine] of which at least 3 months must be devoted to the care of critically ill non-medical patients (i.e., SICU, Burn Unit, Transplant Unit, Neurointensive Care, or equivalent.) This experience should consist of at least one month of direct patient care activity, with the remainder being fulfilled with either consultative activities or with direct care of such patients. (Educational Program, Section VIII.C.2.b), CAAR-1105, CIT:4.D;)

Answer:

Committee Standard:

- Minimum 18 months clinical.
- Continuity clinic time during research, or the additional 6 months of clinic required during research may not be used to reduce the 18 months (24 months) of (block) clinical time.
  - Programs must be structured to provide a minimum 9 months in pulmonary.
    - For rotations that combine pulmonary with other (i.e., critical care, research), the fraction of time spent on pulmonary must be calculated, and the total time training in pulmonary diseases must equal or exceed 9 months.
  - Programs must be structured to provide a minimum 9 months critical care.
    - For rotations that combine critical care with other (i.e., pulmonary-research), the fraction of time spent on critical care must be calculated, and the total time training in critical care must equal or exceed 9 months.
    - Of the 9 months critical care, least 6 months must be medical ICU.
      - This includes MICU, CCU, Respiratory ICU, etc.
      - The program may define medical or non-medical ICU rotations that do not “fit” in the examples in the program requirements.
      - For mixed medical-surgical ICU rotations, the fraction of time spent on medical ICU must be calculated, and the total time training in medical ICU must equal or exceed 6 months.
    - Of the 9 months critical care, at least 3 months must be non-medical ICU  
The purpose of this requirement is to allow Pulm-CC fellows to gain experience in the care of a wider variety of ICU patients than the traditional MICU patient, i.e., surgical, trauma, neurology, etc., patients.
      - This includes SICU, Burn Unit, Transplant Unit, Neurointensive Care, etc.
      - The program may define non-medical ICU rotations that do not “fit” in the examples in the program requirements.
      - For mixed medical-surgical ICU rotations, the fraction of time spent on non-medical ICU must be calculated, and the total time training in non-medical ICU must equal or exceed 3 months.

Note: There is an identical 9 month critical care/ 6 months medical ICU/ 3 months non-medical ICU requirement for critical care medicine programs (1-year and 2-year).

Note: Chronic ventilator units are not considered MICU.

### **Additional Training in Programs with 18 Months Research**

Question:

*“Our program is configured as 18 months clinical and 18 months research. What are the requirements for additional clinic time?”*

Program Requirement:

In programs with fewer than 24 months of required clinical experience, an additional ambulatory experience of one half-day per week must be provided for fellows for six months, such as longitudinal experiences in cystic of fibrosis, interstitial lung disease, etc. This ambulatory experience must not occur during the 18 months of clinical training. (Educational Program, Section VIII.C.3.a)

Answer:

Programs with an 18-23 month clinical curriculum must schedule an ADDITIONAL ½-day per week specialty clinic, weekly and consecutively, during research for at least 6 months. These additional clinics are intended to ensure adequate subspecialty expertise in pulmonary diseases for fellows who have less than 12 months of exposure to each of the subspecialties (critical care and pulmonary diseases), that each require 12 months of clinical training in mono-specialty training programs.

- This time is in addition to continuity clinic
- It must be longitudinal, at least one half day per week on a weekly basis for the duration of the assignment, not block time.
- This may be continuity practice or specialty clinic(s)
- Time may be spent in more than one single specialty clinic.
  - The RRC-IM would allow up to three different specialty clinics during these 6 months (i.e., three clinics for two months each, two clinics for three months each, or a 4-month and a 2-month clinic).
  - The minimum duration of each clinic must be attended for at least two months (i.e., 8 sessions) in consecutive weeks in order to experience sufficient exposure and familiarity to the specific clinic.
  - The RRC-IM will also allow fellows to spend every other week for six months in two separate clinics.
- These additional clinics must be scheduled during research time

Note: The ACGME accredits clinical training. This PR and standard were accepted upon the recommendation of the specialty societies for those programs with 13-18 month of research. The additional 6 months of specialty clinic is designed to ensure adequate clinical expertise (especially in pulmonary diseases) for those fellows with less than 12 months critical care and/or less than 12 months pulmonary training.

**Procedures**

Question:

*“What procedures does the program need to track for pulmonary critical care fellows?”*

Answer:

<b>Pulm-CC Procedures that Must be Documented In Fellow’s Procedure Log</b>
1. Fiberoptic bronchoscopy procedures including those with <ul style="list-style-type: none"> <li>- transbronchial biopsies</li> <li>- bronchoalveolar lavage</li> <li>- transbronchial needle aspiration</li> <li>- bronchial biopsies</li> </ul>
2. Chest tube insertion
3. Endotracheal intubation
4. Arterial Line insertion
5. Central venous line insertion
6. Pulmonary artery catheter insertion
7. Thoracentesis
8. Cardiopulmonary exercise testing

**Section IX. Faculty**

**Minimum Key Clinical Faculty**

Question:

*“What is the minimum number of ABIM-certified KCF for our program.”*

*“How many publications are required by KCF”*

Program Requirement:

See General Subspecialty FAQ for additional details and program requirement.

[The critical care clinical teaching faculty at the primary training site must include each of the following:]

There must be a minimum of six key clinical faculty, including the program director. At least three of these

key clinical faculty members must be certified in pulmonary disease (or possess equivalent qualifications, and at least three must be certified in critical care medicine. (Faculty, Section IX.B.2.)

[The critical care clinical teaching faculty at the primary training site must include each of the following:]  
 In programs with an approved fellow complement of more than nine fellows, a ratio of key clinical faculty to fellows of at least 1:1.5 must be maintained. Fifty percent (50%) of the key clinical faculty must be certified in each discipline. (Faculty, Section IX.B.3.)

Answer:

See below for calculation of minimum required key clinical faculty, and the scholarly productivity expected of the KCF.

<b>Pulm-CC KCF and Research Productivity</b>						
<b>Minimum 6 KCF or 1:1.5 faculty-fellow ratio for programs with 10 or more fellows</b>						
<b>Approved Fellow Complement</b>	<b>Minimum Certified KCF (incl PD)</b>	<b>Minimum Certified Pulm KCF (incl PD)</b>	<b>Minimum Certified Crit-Care KCF (incl PD)</b>	<b>Majority Minimum KCF (51%)</b>	<b><u>PARTICIPATION</u> KCF with at Least 1 Pub Past 3 Years</b>	<b><u>PRODUCTIVITY</u> Pubs All KCF Past 3 Years (1/yr x 3 yrs)</b>
3	6	3	3	4	4	12
4	6	3	3	4	4	12
5	6	3	3	4	4	12
6	6	3	3	4	4	12
7	6	3	3	4	4	12
8	6	3	3	4	4	12
9	6	3	3	4	4	12
10	7	3/4*	3/4*	4	4	12
11	8	4	4	5	5	15
12	8	4	4	5	5	15
13	9	4/5*	4/5*	5	5	15
14	10	5	5	6	6	18
15	10	5	5	6	6	18
16	11	5/6*	5/6*	6	6	18
17	12	6	6	7	7	21
18	12	6	6	7	7	21
19	13	6/7*	6/7*	7	7	21
20	14	7	7	8	8	24
21	14	7	7	8	8	24
22	15	7/8*	7/8*	8	8	24
23	16	8	8	9	9	27
24	16	8	8	9	9	27
25	17	8/9*	8/9*	9	9	27

\*Where odd number of KCF are required, program may have an uneven number, such as 3 CCM and 4 Pulm KCF for a required KCF of 7. Faculty members with dual board certification can be counted as either Pulm or CCM.

- Publication = Research publication, review article, or editorial in a peer review journal (PRJ), funded peer-review grant, or book chapter.
- Scholarly case reports acceptable (Sept 2007) if indexed in Pub Med, and copy submitted with PIF
- Peer review publication = indexed in Pub Med (or Medline). If not in Pub Med, PD must supply evidence

- of peer review
- In press or accepted for publication counts. Submitted or in preparation does not count.
  - Abstract, illustration, letter to the editor, presentation, or publication in non-PRJ does not count.
  - Peer-reviewed funding (NIH, NCI, or other government-funded or national-foundation funded) counts
  - Industry, pharmaceutical, or other non-peer-review grant does not count.
    - Exception: Pharmaceutical studies in which the KCF is the overall PI (lead investigator) for all sites will be accepted as counting as one product of scholarship
  - 1 paper = 1 paper; Do not count multi-author papers more than once.
  - Count the last three calendar years prior to PIF submission. If site visit is in Sep. 2008, count publications from 2005, 2006, and 2007 as well as 2008.
  - Contribute to participation: Only ABIM certified KCF
  - Contribute to productivity:
    - Certified KCF
    - Additional sub-specialty KCF (above minimum required, certified or non-certified)
    - Non-physician faculty and faculty in other specialties IF:
      - Contribute to fellow education
      - Devote at least 10 hours/ week to the program

### **Program Director Qualifications**

#### Question:

*“Does the Pulm-CCM PD need to be ABIM certified in both specialties?”*

#### Program Requirement:

A training program must be under the direction of an internist who is Board certified in pulmonary disease and/or critical care medicine. If the program director does not have appropriate credentials in both specialties, an appropriately credentialed and full-time key clinical faculty member must be identified as responsible for the education program in the second specific area. (Faculty, Section IX.B.1.)

#### Answer:

The requirement allows flexibility.

- The PD must be ABIM certified in Pulmonary and Critical Care Medicine; or must be certified in either Pulmonary or Critical Care Medicine.
  - If certified in only one specialty, one of the KCF must function as an APD with responsibility for the curriculum of the specialty for which the PD is not certified.

### **Section X. Facilities and Resources**

#### **Presence of other IM Fellowships**

#### Question:

*“We are considering forming a new pulmonary-critical care program. What other fellowships must be accredited at our institution?”*

#### Program Requirement:

[In addition to the facilities and resources outlined in the Program Requirements for Fellowship Education in the Subspecialties of Internal Medicine, each of the following must be present at the primary training site:] In order to provide opportunities for peer interaction in the care of critically ill patients, the primary training site should sponsor at least 3 accredited subspecialty programs from the following disciplines: cardiovascular disease, gastroenterology, infectious diseases, nephrology, or pulmonary disease. (Facilities and Resources, Other Facilities, Resources, or Support Services, Section X.D.1.)

Answer:

Committee Standard:

Because of the unique multidisciplinary nature of Pulm-CC training, the PRs require peer interaction from at least three concurrent IM fellowships from the 5 listed.

Note that pulmonary is included as one of the five. Therefore, if a program has a pulmonary program in existence and wants to create a combined Pulm-CC fellowship, the institution must sponsor at least two additional fellowships from: cardiology, gastroenterology, infectious diseases, and nephrology.

## **Sleep Laboratory**

Question:

*“Does the sleep disorders laboratory need to be located at the primary training site? Does the laboratory need to be accredited?”*

Program Requirement:

There must be a diagnostic laboratory for sleep disorders (N.B.: These may be located at institutions other than the primary training site.). (Facilities and Resources, Other Facilities, Resources, and Support Services, Section X.D.4.)

Answer:

The sleep disorders laboratory may be located at an institution other than the primary training site. It does not need to be accredited by the American Academy of Sleep Medicine. However, institutions offering accredited training in Sleep Medicine must have an accredited sleep disorders laboratory.

## **Minimum ICU Census**

Question:

*“Please explain the census requirements. Does this PR apply to all ICUs, or just the MICU?”*

Program Requirement:

[In addition to the facilities and resources outlined in the Program Requirements for Fellowship Education in the Subspecialties of Internal Medicine, each of the following must be present at the primary training site:] With respect to critical care medicine, in units to which a fellow is assigned, an average census of at least five patients per fellow is required. (Facilities and Resources, Other Facilities, Patient Population, Section X.E.2.)

Answer:

On each critical care unit listed in the PIF block diagram, the average daily census (ADC) of patients in the unit must average 5 patients per fellow on duty in that unit.

## **Trauma**

Question:

*“What are the requirements for training in Trauma?”*

Program Requirement:

[In addition to the facilities and resources outlined in the Program Requirements for Fellowship Education in the Subspecialties of Internal Medicine, each of the following must be present at the primary training site:] The program must provide additional clinical experience with other critically ill patients, which may include surgical, shock/trauma, and neurologic/neurosurgical intensive care units; pediatric intensive care unit, burn unit; dialysis unit; anesthesia service; cardiac catheterization laboratory; high-risk pregnancy intensive care unit; and transplant unit. (Facilities and Resources, Other Facilities, Patient Population, Section X.E.4.)

Fellows must have formal instruction and clinical experience in the evaluation and management of patients with trauma. (Specific Program Content, Clinical Experience, Section XI.A.4.c)

Answer:

- The RRC-IM considers experience leading to subspecialty expertise in the care of patients with major trauma to be an important component for a training program in Critical Care.
- The RRC-IM expects that fellows will have the equivalent of at least one month of experience in the care of trauma patients – either in a block rotation or in aggregate over the duration of the training program. Pure consultative care (e.g., ventilatory management only) is considered insufficient to acquire the expertise needed to care for critically ill trauma patients.
- Some hospitals do not have major trauma centers, but do have all of the other requisite faculty, patient, and facilities needed for training in critical care. Therefore, the RRC-IM will accept a rotation in trauma to a Participating Institution (i.e., a trauma unit experience) of at least 1 month duration in fulfillment of these PRs.

## **Section XI. Specific Program Content**

### **Pneumothorax Management**

Question:

*“How does the RRC define competency in pneumothorax management?”*

Program Requirement:

Fellows must have formal instruction, clinical experience, and must demonstrate competence in the management of pneumothorax (needle insertion and drainage system). (Specific Program Content, Technical and Other Skills, Section XI.B.1.e))

Fellows must have formal instruction, clinical experience, and must demonstrate competence in chest tubes and drainage systems. (Specific Program Content, Technical and Other Skills, Section XI.B.1.i))

Answer:

The RRC-IM expects Pulm-CC fellows to achieve competence in all aspects of management of all aspects of a pneumothorax

- Assessment
- Urgent and elective needle drainage or chest tube placement.
- Managing drainage systems