



**Summary of Public Comments**  
**PRC5: Increasing the Supply of Forensic Pathologists in the United States**  
**Prepared by the SWGMDI Board of Directors**  
**September 30, 2012**

Introduction

The SWGMDI Document “PRC5: Increasing the Supply of Forensic Pathologists in the United States” was posted for public comment between June 22 and September 22, 2012. All comments received were reviewed and addressed by the SWGMDI Board. This report includes all comments received and the SWGMDI’s response to the comments.

Overall Results

Comments were received from 22 individuals and from 2 organizations. Responders included forensic pathologists (7), professors (5), non-MD coroners (2), laboratory director (1), training director for a security business (1), Pathology Department Chairman (1), criminalist (1), physician research administrator (1), autopsy supervisor/investigator (1), pathologist (1), and pathology assistant (1). A formal response was received from the College of American Pathologists and the National Association of Medical Examiners.

Comments Received and SWGMDI Responses to Comments

There is no shortage of Forensic Pathologists. As evidenced by my own experience. I have extreme difficulty finding a job. When I do manage to find a job the salary is half that of a surgical pathologist. Often, I receive no call back to my application.

**RESPONSE:** This response is from a personal perspective and involves factors other than those related to lack of forensic pathologists in some areas of the country. No changes made.

The changing nature of pathology education in medical school probably doesn't have much effect on students going into forensic pathology.

Needs some grammar updates Line 21, Spell out SWG. Spell out all acronyms on first use.

Line 30, Spell out ACGME. Spell out all acronyms on first use.

Line 38. Don't start sentence with a number. Spell it out.

Line 39, Replace ""of the"" by ""of these"".

Line 40, insert comma following fellowships

Line 57, insert comma following filled

Line 60, Replace ""less"" by ""fewer""

Line 75, Replace ""Forensic pathologist salaries"" by ""Salaries of forensic pathologists""

Line 77, Replace ""100K"" by ""\$100,000"" and ditto for 200K, These are too colloquial for this important document.

Line 80, Regarding ""Rural areas also complicate"", This is not true. A rural area cannot complicate. Humans complicate.

What you want to say is that: Insufficient funding in rural areas because of low mortality rates and tax bases makes it difficult to support financially board-certified forensic pathologist in many rural areas of the United States.

[RESPONSE: The document was edited to reflect these changes except for lines 13-14, which is a debatable statement.](#)

Line 81, correct the split infinitive. Change to ""to justify fully"".

Line 86, Spell out all acronyms on first use. including SWGMDI

Line 89, Spell out all acronyms on first use. including PGY

Lines 90 and 91. Same comments as line 77.

Line 93. Consider replacing ""such"" by ""satisfactory"". A comma is needed after ""salaries"".

Line 105, A comma is needed after ""deaths"".

Line 106, Replace ""via such"" by ""by"".

Line 107, A comma is needed after ""purposes"".

Line 126 Delete the period after discipline

Line 138 Eliminate the split infinitive. Write ""to reflect better""

Line 155, Replace ""getting"" by ""obtaining""

Line 167, Delete the comma after students

[RESPONSE: The document was edited to reflect these changes](#)

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Care needs to be taken at the medical school level to insure that whatever the exposure is to forensic pathology, there is no additional expense incurred in the form of increased tuition...It would be much more acceptable if treated as part of a medical pathology residency program...Salaries should be commensurate with the industry norms and risks associated with this specific practice type....A very factually comprehensive document...Nice job...

[RESPONSE: These points were incorporated into the document except for the statement about increased tuition.](#)

It looks like your draft is well put together with documented reasons and data to back up your statements. The only thing I would recommend is to make your objectives measurable. For instance, how are you going to measure "cooperation"?

[RESPONSE: Subsequent documents may address measureable outcomes but it is premature to address them at this time.](#)

80-86: What about including forensic pathology in the designations of "underserved" areas that are similarly used for primary care?

[RESPONSE: This concept was incorporated into the document.](#)

Thanks for the opportunity to offer response/comments to your draft report about recruitment difficulties in forensic pathology.

I am a pediatric intensivist ( pediatric critical care specialist). When I graduated from medical school, I matched with forensic pathology, and it has been my lifelong dream to return to it one day. I love histology and surgery! But, ultimately, I chose to see living children. I am boarded in both pediatrics and pediatric critical care medicine.

One thing to think about, in any serious consideration of manpower issues, is that requiring graduating medical students to make a permanent choice between seeing living patients, and practicing medicine for and on behalf of the dead is an awful lot to ask at that particular stage.

Whenever I inquire about how my considerable training and experience might be complemented and enriched toward forensic pathology now, at a later career junction, I receive almost no responses.

I have seen enough and done enough with critically ill and injured children, that I would now be able to make that commitment without reservation. And, I would be willing to undertake fellowship training for 2-3 years in order to accomplish that.

It is my own honest opinion that the forensic pathology field/boards themselves do not want qualified sub-specialists from other medical specialities/subspecialities to make this transition. At the very least, such a transition is not enabled, and I think that forensic pathologists perhaps bask a bit in their rarity.

**RESPONSE :** [RESPONSE: These comments are of a personal nature and were not incorporated into the document.](#)

The facts as outline on these lines are not considered in a realistic context. And, my comments apply to realistic solutions; all subspecialties are facing serious manpower shortages at present.

Studies have shown that there is a shortage in all areas of healthcare as well as in the field of pathology. The specialty of pathology attracts approximately 1% or 1/100 medical school graduates. Thus a very short supply has been felt for many years. The profession "Pathologists' Assistants" has helped curb this shortage by the acceptance of allied health professionals willing to assist board-certified pathologists including board-certified forensic pathologists as healthcare extenders. Similarly the profession physician assistants and nurse practitioners provide services towards shortages in other areas of healthcare. "Board-certified Forensic pathologists represent less than 2% of the above mentioned board-certified pathologists and as shared in your article, many jurisdictions rely on people who may not have this necessary credential. A shortage of pathologists, pathologists' assistants and under validation or lack of an understanding of the value of the ""general"" autopsy or the ""forensic"" autopsy mentioned in your article has existed for the 29 years that I have been a Pathologists' Assistant. If portrayal of crime dramas draw big audiences why is it that training programs aren't receiving the same draw? These dramas show that autopsies are for the living!

More affordable student loans for all forensic-related professionals is one answer. Another, I believe is the return of a 20-30% autopsy rate for each hospital that was a requirement for hospital accreditation until the 1960's. As Abraham Flexner reported in the early 1900's hospitals and medical training centers with the highest autopsy rates provided the best medical outcomes. Autopsy rates have plummeted below the 8.5% that was stated in your article yet, the outcomes correlation has been studied and

remains true despite our current rates of misdiagnoses from reliance solely on medical technology. IN MY OPINION, until the consumer and the medical community demand the return of autopsies and then recognize those who perform these procedures, the shortages will not change. My hope is that we can work together as medical consumers, healthcare professionals, insurance providers and become proponents towards (as Stephen Cina M.D. of the CAP Forensic Pathology Committee commented) ""A general autopsy itself is a very valuable tool in medicine"" and it is also a very valuable tool in justice, medical research and so many other facets of our wellness.

The document is an excellent high level view of the issues with some potential specific solutions. The shortage of FPs is currently a very real problem and the time to implement these proposals (if any actually happened) would take years and then it would require many additional years to reap the downstream benefits of more FPs. Although the topic of the paper is to address a shortage of FPs it would also be useful to address, in my opinion, potential short and intermediate range solutions. Recruiting FPs shares similarities with recruiting physicians to rural locations and general primary care practices. The use of mid-levels is very common in medicine and can provide a mechanism to leverage a small number of physicians. I think the use of mid-levels (eg. pathology assistants) should be considered as a possible solution to this acute shortage of FPs. It is much easier for me to imagine a development of a 1 yr. FP training program for PAs that are already working (and trained in performing autopsies) as a relatively rapid response to the shortage issue. The idea of a FP supervising a small group of PAs on several cases (similar to what occurs in anesthesia) would also potentially allow regional offices with greater volumes of cases to develop (saving on resources and increasing access to expensive testing-forensic radiology).

[RESPONSE: We have included a reference to the National Association of Medical Examiner's Position Paper on the use of pathologist assistants in forensic pathology. We also added reference to more affordable student loans.](#)

When I have had to fill vacant positions I have had no shortage of applicants. Those that perceive a shortage should look at the salaries of the specific positions. In other words, those people who claim there is a shortage are usually offering a low salary for a large amount of work. If you offer a good salary you will have no shortage of applicants. My concern would be that bureaucrats are trying to increase the number of forensic pathologists so they can continue to offer low compensation or even lower compensation.

[RESPONSE: Yes, there are places in which jobs are attractive. This comment does not address the lack of forensic pathologists in some areas of the country. We have no evidence that the last sentence has merit.](#)

P234 TO MAINTAIN THEIR PATHOLOGY PROGRAMS, MEDICAL SCHOOL AFFILIATED PATHOLOGY TRAINING PROGRAMS MUST PROVIDE THEIR RESIDENTS ONE MONTH TRAINING IN FORENSIC PATHOLOGY. CHARGE FOR THIS TIME. IF ALL FORENSIC OFFICES DO THIS THEN THE UNIVERSITIES HAVE NO CHOICE BUT TO PAY. EXCELLENT PAPER

[RESPONSE: We emphasized this in the revised document.](#)

Having gone through an RRC review during my fellowship year, I agree very much with this part. In general I think the recommendations are helpful. I would omit the parts about loan forgiveness and increased fellowship year funding (it's one year, which doesn't matter in the grand scheme and applicants know this). The rest I like.

**RESPONSE:** We have clarified that forgiveness programs could involve medical school loans.

Line 286 Insert a comma after ""factors"".

Line 288 Insert a comma after ""lessened"".

Line 293 Replace ""Review Committee (RRC)"" by ""RCC"" because it was, or should have been, defined in line 194.

Line 294 Isn't somewhat one word?

Line 295 Split infinitive. Write ""to practice successfully""

Line 297 Delete ""the"" following ""learning"".

Line 301 Replace ""be able"" by ""enable supervisors"".

Line 302 Insert a comma after ""methods""

Line 303 Insert commas after ""ACGME"" and ""methods"".

Line 303 Replace ""have"" by ""need"".

Line 314 Insert a comma after ""positions"".

Line 317 Insert a comma after ""office"".

**RESPONSE:** The document was edited to include these suggestions.

Overall, it is a good effort. I think we can make some minor improvements:

1. get the CAP's 2011 Practice Characteristics Survey. I believe it shows that AP/CP folks make around \$280000 base + \$60000 incentives. and we have trained a year more than many of them.
2. in the recommendation for loan forgiveness, I would not apply it to ""pathology and forensic pathology."" Pathology can take care of itself-limit it to FP.
3. I think I did a NAME survey a few years back that looked at the incidence of depression amongst FPs as well as physical injuries. It could provide some additional background info.
4. Since the CAP has recently defined the autopsy as the practice of medicine, consider working with CAP and CFSO to have autopsies covered by CMS. It would also fit into Obamacare's concept of results-driven medicine.
5. I think many residency training programs would shut down without the autopsies we provide. You mention this but I really think we should strongly leverage this fact.
6. I think that those FP programs affiliated with residency training hospitals need to be able to take advantage of university/hospital assets that will help them handle the ACGME process. Perhaps the residency training coordinator can do some of our paperwork.
7. Can we make reference to the NAS recommendation that only Board certified specialists will be allowed to testify in court one day? Without enough FPs, the legal system grinds to a halt.

**RESPONSE:** We edited the document to reflect the thoughts in items 1, 2, 5,6, and 7.

I have spoken to numerous medical students and residents and one reason why many of them do not want to go into forensic pathology is because of the coroner system, and even worse the sheriff-coroner system in California. Many physicians after spending over ten to twenty years in training to become specialists find it very unappealing to work under someone who is not a physician and who has no

inkling or basic understanding of medicine. In some jurisdictions, a forensic pathologist works under a sheriff and is supervised by a police officer who may have only a high school diploma. The coroner system is a very primitive system, which should be eradicated. I think it will become more appealing to medical students and residents to become forensic pathologists, if the coroner and sheriff-coroner systems are replaced by medical examiner systems nationwide. Medical examiner systems are more professional and sophisticated, and provide better services to the community at large especially with the fastly changing medical technology and medical sciences.

[RESPONSE: The issue of coroner versus medical examiner systems will be addressed in another SWGMDI document, probably in 2013.](#)

The document does a very good job illustrating the issues surrounding the hiring and retention of forensic pathologists in the United States. It clearly explain why there is a deficiency of forensic pathologists across the nation: lack of forensic pathology programs, lack of medical student interest, lack of funding, inadequate salary, large time commitment, etc.

The needs are clearly presented and the recommendations for meeting those needs are sound.

I would also like to add the following:

- 1) Several new medical schools have opened/are opening throughout the United States. The mission of many of these schools is to train new primary care physicians. There is a tremendous need for primary care physicians across the U.S. The reasons for a lack of primary care physicians is very similar to the lack of forensic pathologists: lack of interest by training programs and students who prefer to focus on specialties, inadequate salaries, large time commitment, lack of respect, etc. It might be a good idea to encourage these new medical schools to also offer forensic pathology training programs as part of their curriculum. The need and the reasons for that need is very similar.
- 2) The public needs to be made aware of the need for forensic pathologists across the nation. Follow the example of primary care physicians by publicizing the needs through local and national media. Public support will encourage local, state, and national officials to act.
- 3) Need to improve student interest. Recruitment needs to begin at the undergraduate level. The field can attract undergraduate students by offering undergraduate student internships, offering undergraduate forensic pathology courses and concentrations, visit schools during career fairs and/or offer to give talks. Early recruitment efforts will increases that chances that a student who is admitted to a medical school will pursue a forensic pathology specialty.
- 4) A higher salary will not be enough to recruit and retain forensic pathologists. The availability of proper equipment and proper facilities is imperative if the forensic pathologist is to perform his/her duties effectively. If the forensic pathologist feels that he/she can perform the job without obstruction, then job satisfaction will be high and will be able to attract new professionals and retain the existing ones.

[RESPONSE: The suggestions in items 1-4 were incorporated in the edited document.](#)

5) In addition to higher salaries, the forensic pathologist needs down time. The forensic pathologist needs more time off and longer vacation time to avoid physical and mental fatigue. This will increase the job satisfaction and job performance. We need to keep in mind that the forensic pathologist faces not just death, but gruesome death and witnesses the worst of humanity on a daily basis. Therefore, the job of the forensic pathologist is so unique and valuable that it deserves special recognition by society. All suggestions to "short-cutting" the career path or developing "a forensic pathology training path" (lines 322 - 332) should be omitted. The document insists that residency training faculty must be supportive of those who are pursuing a career in forensics (line 193, for example). Shortening the training of forensic pathologists (here after, "FPs") will undermine those efforts and only isolate FPs further from other pathologists and physicians. The whole scope of pathology should be encountered during the residency of future FPs and cultivating a broad and integrative pathology training experience should be encouraged. If anything may be omitted it is the clinical pathology portion of residency. Even though the clinical pathology years are frequently not required to enter an FP fellowship, a combined AP/CP residency with subsequent FP fellowship is not too long or burdensome if only the earning potential were commensurate with the level of training! Salary is the key! PGY appropriate wages are not the problem, it is the salary of practicing forensic pathologists that turns people away from this career path.

Overall, very well written document.

**RESPONSE:** We have given greater emphasis to the need for improved salaries. We have eliminated reference to short-cutting.

Just one comment is the use of acronyms such as line 89 ""PGY"" or line 336 ""JCAHO"". These were not defined within the document and are not familiar to this reviewer. There were others and this document should be checked for undefined terms.

**RESPONSE:** We have spelled out all acronyms, at least the first time they are used if they are used more than once.

May want to include a Summary or Conclusion section to sum up the entire document prior to #10 recommendation and the references. "

**RESPONSE:** We have added an Executive Summary at the front of the report which described the recommendations in bullet form.

As example of novel funding mechanisms, the JCAHO should work with medical care funding sources to ensure payments to hospitals whose patients are autopsied by the medicolegal death investigation system or in-house (on site).This is long overdue; without the proper structure for Pathology in general, Forensic Pathology as a specialty will continue to decline with Pathology.

**RESPONSE:** This idea is a good one but also too complicated to address in this report. The SWGMDI may address this in a future document.

I have mixed feelings about this [shortening training]. Even though I don't use my surgical pathology training in a classical sense (i.e. staging tumors), the immersion of it in residency taught me more intangible skills, like logic, classification and judgment. You still need to be aware of all of the entities out there. If you don't know about it, you won't think about it. I disagree about reducing microbiology training, since FPs are on the front lines of bioterrorism and infectious disease surveillance.

RESPONSE: We eliminated reference to short-cutting.

I would be very happy to offer a representative of the American Association of Pathologists' Assistants (AAPA) to share more about our profession and the struggle to attract qualified students into our US and Canadian training programs.

RESPONSE: See reference to NAME's Pathology Assistant Position Paper

207-212 Special financial incentives for fellows is a must

217-230 The salaries have to be at least above the median for a general pathologist

260-269 A new and novel approach is needed. We need to create a Private fellowship programs by entrepreneurs who will contract various organizations for strict training purposes, incorporating all the resources available all over the world. We need to deal with this as national security issue. Forensic autopsy reveals a lot more than just cause of death it may reveal a whole new way of approaching dangerous diseases. Thanks

RESPONSE: Incentives and salaries were addressed in the document. The development of Private Fellowships would be difficult, if not impossible, to implement for multiple reasons. We did add the concept of national security.

Line 228: How about DoD? NIH should divert some money from supporting "novel" research to forensic pathology. Line 152: Is one hour enough for such a course? Line 324: Perhaps efforts need to be used to attract some foreign-trained professionals into this field. Salaries should be made competitive. Otherwise, it is going to be really hard to get enough forensic pathologists. However, it is easier said than done.

RESPONSE: We added reference to Do Din the report. We struck the one hour limitation to the proposed course. A sentence about NIH funding was added. At this point, foreign trained forensic pathologists might not be able to meet the board certification requirement that is being proposed, so we did not include this suggestion.

lines 65, 137, 232

An obstacle to maintaining ACGME accreditation of forensic pathology fellowships that I have twice witnessed is the assumption by ACGME that the fellowship comes under the umbrella of a core pathology program, which in turn comes under the umbrella of an institutional DIO. Communication to and from ACGME about frequent changes in accreditation standards is assumed by ACGME to follow such a hierarchy. Free standing fellowships are vulnerable to missing important news and suffering the consequences during inspections. In 2014, pathology training will face a new paradigm shift at ACGME in the form of the Milestone Project and the Next Accreditation System. Although there are reasons why a forensic pathology fellowship may need to have separate administration from the academic center, all fellowships should have liaison with core pathology programs, and NAME should foster the participation of all forensic pathology fellowship directors in a community of interest in GME."

RESPONSE: We added to the report statements about the value of GME offices and their potential assistance in managing forensic pathology training programs.