



## PRC#8 Possible Study Models to Assess the Utility of Autopsy in Contentious Medicolegal Categories of Death Comment Report

Created by SWGMDI's Research Committee

Open for Public Review and Comment December 3 2012 to March 3 2013

Total responses received= 12

25% endorsed the draft as is.

*Comments Received from 11 individuals and the National Association of Medical Examiners (NAME) Standards Committee, NAME Executive Committee (EC), and College of American Pathologists Forensic Pathology Committee.*

### Commenter #1

I completely disagree with this. Just because a majority of offices do one thing does not make it best practice.

**Response:** We never made any claim about majority rules. No changes indicated.

The only way to accurately do this study is to do autopsies and see results as the study out of Europe did a few years ago. Have someone review a case - if no autopsy what is the Cause/Manner of Death (C/MOD)? Then autopsy the case - did the C/MOD change? If so, was it significant? Then do micros - did the C/MOD of death change? If so, was it significant? All of these studies have been done and should be reviewed.

**Response:** We have reviewed those studies. There are similar American studies as well. None of them set out to answer the question posed here, regarding autopsies in specific types of contentious cases. No changes made.

The study as proposed here only says commonality nothing more and I cannot support it.

**Response:** Yes, we are promoting consistency (we think a better word than commonality), which is desperately needed in the field. Furthermore, we did state in the document, "While the results of this research are likely to influence the practice style of death investigators and forensic pathologists across the country, we must accept that the innumerable variables associated with any one death (i.e., the concept that every death investigation is unique), combined with highly specific local and regional sociocultural and political influences, will prevent institution of strict standardization." No changes made.

### Commenter #2

No comment, just a "no" for endorsement.

**Response:** No changes indicated, as there were no specific comments to address.

**Commenter #3**

I notice that one of the advisory members is Dr. Evan Matshes and assume this is the pathologist who worked in Calgary, Alberta. His work is under review. This is perhaps similar to the issues of a pediatric forensic pathologist Dr. Charles Smith whose work led to the Goudge Inquiry and Report.

**Response:** Yes, this is the pathologist who was under review in Alberta. His work was reviewed by the licensing authority in Alberta (College of Physicians and Surgeons of Alberta) and all complaints were dismissed, finding that Dr. Matshes met the standard of care. No changes indicated.

**Commenter #4**

This looks like a good study... no other comments or edits to suggest.

**Response:** No changes indicated.

**Commenter #5**

While not a member of the SWGMDI, I would be more than happy to help with this study. It is sorely needed.

**Response:** No changes indicated.

**Commenter #6**

The biggest issue in regards to this topic, is that the individual state and county requirements vary greatly in regards to what is and is not required ...NAME requirements are fine but across the board implementation will be very difficult...Very ambitious, good luck...

**Response:** No changes indicated.

**Commenter #7**

Page 1: Where is the scope statement of this document? The scope of the document was introduced in the first paragraph.

**Response:** We did not include an executive summary, as the document is quite short. No changes made.

**Commenter #8**

I feel that line 26 should be changed to state that there are multiple types of "postmortem examinations" available within the practice of forensic pathology, including: "views," "external examinations," "autopsies," "limited dissections/partial autopsies," and "complete/full autopsies," and each of these entities should be defined and accepted by SWGMDI and its partners, understanding that an individual practicing forensic pathologist might have his/her own personal definitions of each that might be in disagreement with the SWGMDI.

**Response:** We agree that these other definitions are useful, but not for this particular study. The aim of this study is to assess the utility of autopsy (i.e., complete autopsy) in certain types of cases. No changes made.

**Commenter #9**

I feel that line 26 should be changed to state that there are multiple types of "postmortem examinations" available within the practice of forensic pathology, including: "views," "external

examinations," "autopsies," "limited dissections/partial autopsies," and "complete/full autopsies," and each of these entities should be defined and accepted by SWGMDI and its partners, understanding that an individual practicing forensic pathologist might have his/her own personal definitions of each that might be in disagreement with the SWGMDI.
<b>Response:</b> We agree that these other definitions are useful, but not for this particular study. The aim of this study is to assess the utility of autopsy (i.e., complete autopsy) in certain types of cases. No changes made.
With lines 9-10, the sentence that begins "Emblematic of this deficiency..." should have this added to it at the end: "...and little agreement as to who should make the decision in an individual case."
<b>Response:</b> We feel that this addition would be redundant; that this idea is conveyed adequately as written. Original verbiage kept.
For lines 18-22, I agree completely with this statement and feel that it should be copied and pasted into the final study document.
<b>Response:</b> No changes indicated.

<b>Commenter #10</b>
I found the tone and tenor of the draft to be condescending and inflammatory. As a scientific exercise, the draft needs to be free of professional bias.
<b>Response:</b> We respectfully disagree with that assessment. We simply pointed out facts: that FP has been slow to embrace evidence-based practice over personal experience and that there is a lack of consistency in practice. Neither of these claims is condescending; they are merely facts. No changes made.
Standards for forensic autopsies do exist that include the NAME Autopsy Standards and NAME Inspection and Accreditation Guidelines. The issue is how to enforce and improve the existing standards.
<b>Response:</b> We aren't talking about creating or enforcing standards. We are talking about a research-based approach to determining the utility of autopsy in certain types of contentious cases. To do this, we must come up with a definition of a "complete autopsy", so that it is clear to everyone involved of what we mean. No changes made.
Forensic pathology is no more controversial than other medical specialties, try getting consensus on prostate cancer treatment. Yes, there are areas where additional research is needed, but 99% of medical examiner cases are not controversial.
<b>Response:</b> We respectfully disagree with that assessment. Some offices see the concept of autopsying all suicides as routine, while others only do external exams. That is not a controversy on "the fringe"; rather, that is a pretty basic and common type of case in FP. That single example shows how incredibly disparate those different offices are. No changes indicated.
There is room in forensic pathology for external examinations and the limited autopsy.
<b>Response:</b> We did not claim that there wasn't room for these types of exams. No changes indicated.

<b>Commenter #11</b>
There should be a section instructing the forensic pathology community to obtain blood from the femoral vein whenever possible and not cardiac blood. When the femoral vein is not

accessible, iliac or subclavian veins should be used in lieu of cardiac "sticks." Terms like "chest blood" and "pooled blood" or "cavity blood" should be avoided, and efforts should be made to obtain blood samples from intravascular sites, not "blind sticks" or cavity bloods, for which no standards exist and usually are of no value to a forensic toxicologist or pathologist for determination of causation.

**Response:** Agreed. However, this document was not intended to make specific recommendations regarding specific procedures. Rather, it is only intended as a general approach to designing study models. No changes made.

#### **Commenter #12**

Wordsmithing in first paragraph: Controversy ~~abounds~~ *exists* within forensic pathology and death investigation.

**Response:** We believe that it does abound, not just exist. Original verbiage kept.

~~Long a discipline in which forensic pathologists touted opinions as facts, *Like all medical disciplines*~~ forensic pathology has undergone a gradual transition toward evidence-based forensic pathology *practice*.

**Response:** We have changed the verbiage in this statement. Change made.

Despite this trending towards an evidentiary approach to diagnoses, limited evidence exists *in some subject areas* to guide fundamental facets of practice.

**Response:** Change made.

We are being asked to establish a "standard of care" practice in regards to the practice of forensic pathology, and after having experienced the outbreak of wide variance of opinion in the process of establishing NAME minimum standards to the performance of the autopsy, the SWG should be prepared for a reawakening of the passionate responses that we all recall from a few years ago.

**Response:** Agreed, but no changes indicated.

In many jurisdictions, there may be instances where the forensic pathologist feels that autopsies are warranted, but are not performed due to budgetary or jurisdictional (statutory) limitations, workload, or lack of availability of a regional forensic pathologist. Would the SWG ultimately propose that results of this study model be used to drive better statutes and/or increased funding of ME/coroner offices where needed—much like deficiencies in NAME accreditation have allowed some offices to successfully argue for increased funding, newer facilities, etc?

**Response:** Perhaps as a secondary outcome. The primary goal is to simply define the utility of autopsy in certain types of cases. We don't know what the results will show. Perhaps in some types of cases, it will show that an autopsy does not provide added utility. No changes indicated.

Achieving consensus defining a standard for a complete autopsy is essentially defining a general standard of practice for regional practices with variable resources, and would highlight perhaps negatively the diverse nature of regional FP practice. It is not clear that a complete autopsy definition that will be universally accepted is attainable – akin to the lack of agreement among clinicians as to what a complete physical examination entails. Maybe the approach should be to define what the minimum examination should include to be considered a complete autopsy.

**Response:** Agreed and appropriate changes made.

It would be useful for the SWG to unequivocally state that the autopsy is the practice of

medicine, and is performed and interpreted in the context of a medicolegal death investigation.
<b>Response:</b> Agreed, and statement added to document.
“This statistical analysis of case categories allows the identification of the most common modes (not clear what the authors mean by mode – would “causes and manners” be better, or can the authors clarify “mode”?) of death within the United States.”
<b>Response:</b> We didn’t necessarily mean only causes and manners-only general categories of types of deaths. Verbiage changed to clarify this.
Annual reports from NAME-accredited offices could also be a useful source of data in this step—but not the sole source, as some offices (particularly smaller ones) might be excluded. Such exclusion could result in collecting data that is not representative of current medicolegal practices.
<b>Response:</b> Agreed. However, we did not intend to get into precise details of study decision in this document. No changes indicated.
A systematic review of the forensic literature should be included. There are already several studies that show the benefits of autopsies. Seeking specific examples from individuals and agencies is useful, but why completely re-invent the wheel? There already are peer-reviewed studies about the benefits and problems with the autopsy.
<b>Response:</b> This is true, but to our knowledge, none were designed to specifically look at different types of cases. No changes indicated.
As they state in their introduction, forensic pathology is undergoing a transition to evidenced-based medicine. Why then revert solely to anecdotal case reports in place of a critical review of the literature and well-designed studies? Basically unpublished individual case reports, the lowest evidence level, are to be used to define objectives.
<b>Response:</b> This is exactly our point; we are doing a well-designed study, rather than anecdotal case reports. We’re proposing a large, multicenter approach to collecting hundreds or thousands of cases, in order to assess the utility of autopsy.
"Positive outcomes" and "negative outcomes" are pretty subjective. Trying to remove the positive/negative effects of the autopsy from the context of the death investigation process is fraught with difficulty and danger. The utility of the autopsy may be heavily influenced by the quality/quantity of information obtained during the investigation. Some comment in the protocol should address this issue.
<b>Response:</b> In Stage 2, we already included the statement, “...the scope of practice of medicolegal death investigation must be defined.” No changes made.
“Using prospective, population-based data from large and small medical examiner and coroner jurisdictions, the utility of autopsy (can the authors be more explicit in defining “utility” – cause of death, manner of death, incapacitation, other public health issues, etc.?) in addressing the category-based objectives of death investigation (as created in stage three) is to be assessed.”
<b>Response:</b> Change made.
We need to establish and maintain autopsy practice standards that clearly define minimal practices in order to provide a measure of uniformity so that our work product is acceptable to the courts of the future. The application of these practices needs to also be predictably established in the process of attempting to establish a high level of quality to death investigation systems across the country. We must keep in mind that the end result of our efforts should result in the establishment of true justice within the legal system, inasmuch as pertains to the work output of forensic pathologists. The autopsy should be performed and defined in a fashion that

meets medical standards. The legal acceptance should be based on the medical standards, not the other way around. The above comments would not, of course, apply to the many autopsies in which there is no criminal/civil aspect (most natural deaths) and justice is not at issue.

**Response:** Agreed. However, no changes are indicated.

A potential negative impact to forensic pathology and unintended consequence of such a study could be the finding that not performing complete autopsies in deaths many of us find important would be that the traditional autopsy has little additional benefit over an external examination, toxicology and/or modern scanning. Pathologists should be prepared for the possibility that traditional autopsies are shown to be superfluous or are not warranted in some cases.

**Response:** Agreed; this is one of the reasons to do the study-to determine the utility (or lack thereof) of the autopsy in certain types of cases. No changes indicated.