

# Evaluating the Necessity, Plausibility and Effect of a Mandatory Wet Lab Examination for Pharmacists

*Word Count: 1161*

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In order to progress, we must embrace change. This sentiment has been the backbone of nearly every social movement, political campaign, and pharmacy advocacy initiative. Nearly 40,000 pharmacists nationwide signed the White House *We The People* petition to recognize pharmacists as healthcare providers.<sup>1</sup> Although change may have its rewards, it is important to recognize its costs. As pharmacists step into a more clinical role, licensure exams are focusing on the evaluation of clinical skills and forgoing practical ones. Specifically, pharmacy practice has been gearing away from the traditional role of pharmacists as compounders. Pharmacists' opinions are split on the need for a mandatory wet lab component of licensure exams. One group may argue that the act of compounding has become antiquated as we transition into provider roles; however, compounding is deeply rooted in our practice and eliminating this would be a detriment to our profession and patients. A mandatory wet lab examination for licensure should be implemented across the country; to support this, it is crucial to evaluate its necessity, plausibility and effect on pharmacy practice.

A mandatory wet lab exam for licensure is necessary to ensure the safe practice of pharmacy. According to the Institute of Safe Medication Practices (ISMP) *Proceedings from the ISMP Sterile Preparation Compounding Safety Summit: Guidelines for SAFE Preparation of Sterile Compounds Compounding medication errors*, a five-hospital observational study that evaluated the accuracy of compounding small and large volume injectables, chemotherapy and parenteral nutrition revealed a mean rate of 9%.<sup>2</sup> This means that nearly 1 error in every 10 products occurs prior to dispensing. In addition, a 2009 State of Pharmacy Compounding Survey revealed that 30% of hospitals experienced at least 1 patient event due to a compounding error in the past 5 years. Despite these

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<sup>1</sup> Recognize pharmacists as health care providers. The White House Website. <https://petitions.whitehouse.gov/petition/recognize-pharmacists-health-care-providers-1>. Published December 27, 2012. Accessed April 18, 2015.

<sup>2</sup> Proceedings from the ISMP Sterile Preparation Compounding Safety Summit: Guidelines for SAFE Preparation of Sterile Compounds. Institute for Safe Medication Practices Website. <http://www.ismp.org/Tools/guidelines/IVSummit/IVCGuidelines.pdf>. Accessed April 18, 2015.

common and potentially fatal occurrences, only 2 out of 50 states in the U.S., New York and Georgia, require a wet lab practical for pharmacist licensure. Considering that we are a profession that requires virtually 100% accuracy and boasts integrity, it is absurd that measures are not being taken to ensure the compounding competencies of all practicing pharmacists.

One may argue that compounding is an antiquated practice and is no longer relevant in modern pharmacists' roles; however, this could not be further from the truth. In fact, some form of medication compounding appears in nearly every pharmacist role. Whether you are concocting a simple mixture in a community pharmacy, putting together a TPN bag in a hospital, or turning tablets into easy-to-swallow suspensions for long-term care patients, compounding is not reserved for those in specialized compounding pharmacies. One may also argue that the role of compounding has fallen to the technician. However, even if technicians are performing most of the actual compounding, it is ultimately the pharmacists' responsibility to ensure the accuracy and sterility of the final product. Because of this, it is necessary for all practicing pharmacists to be tested and certified in the compounding practice. While a minority of pharmacists may not require compounding skills at their current workplace, they may require it in future roles. As more graduates earn Doctor of Pharmacy degrees, the responsibilities of pharmacists are becoming increasingly versatile; you never know when your job will require you to step into a compounder's role. In most institutions, if some aspect of compounding is needed, it is natural to expect the pharmacist to take the lead. While many pharmacists are moving into clinical roles, it is important not to throw long-standing responsibilities to the wayside. To ensure consistency in competency throughout our profession, it is only reasonable that all practicing pharmacists are certified in compounding.

One may argue that implementing a mandatory wet lab examination in all states will be impractical and costly. Although a mandatory wet lab examination would result in new challenges

and relies on the full support of the state boards of pharmacies, it is a plausible change. Fortunately, there is precedent for mandatory wet lab examinations since it is a requirement for licensure in New York and Georgia. The wet lab examinations in these states may be notoriously difficult, however it would be more unsettling to allow incompetent pharmacists into the workforce. Although implementing a mandatory wet lab examination appears challenging, it is important to recognize the alternative.

*First do no harm.* Every pharmacy student has uttered these famous words of the Hippocratic oath when we took upon the responsibility of becoming pharmacists. Unfortunately, there may come a time in a pharmacist's career where that promise may be challenged. In September 2012, there were reports that patients in multiple states had contracted fungal meningitis from contaminated steroid injections prepared by a Massachusetts compounding pharmacy.<sup>3</sup> Thousands of people were affected by this contamination and several deaths resulted. Although a mandatory wet lab examination may not be the panacea for preventing these tragedies, it would be irresponsible for pharmacists not to do everything in our power to prevent this from happening again. While implementing a mandatory wet lab examination may be a hurdle, the benefits of stopping preventable deaths will be worth every effort.

Without a doubt, instilling a mandatory wet lab examination will change the practice of pharmacy. It will declare to the healthcare community in a unified voice the values of pharmacists. It will declare that we are committed to the competency and continued excellence of our profession. And most importantly, it will declare to the nation that we are committed to taking full responsibility in the integrity of the products in which we dispense, counsel and study. In no way is this change

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<sup>3</sup> Goldman LR. Congress Must Step In To Prevent Another Deadly Meningitis Outbreak. Huffington Post. November 13 2012. [http://www.huffingtonpost.com/lynn-r-goldman/meningitis-outbreak\\_b\\_2118151.html](http://www.huffingtonpost.com/lynn-r-goldman/meningitis-outbreak_b_2118151.html). Accessed April 18, 2015.

intended to contradict the recognition of pharmacists as clinical providers. In fact, establishing a measurable competency in compounding will only provide us in-depth knowledge and stronger influence when providing patient care.

By evaluating the necessity and plausibility of a mandatory wet lab examination and its effect on pharmacy practice, it is reasonable to believe that such an examination is in the best interest of pharmacists, providers and most importantly, our patients. While implementing this requirement may appear to be a logistical hurdle, it will undoubtedly improve patient safety and help support the initiative to recognize pharmacists as providers. As I mentioned, in order to progress we must embrace change. Without a doubt, this change will better our profession and allow us to launch into the next era of pharmacy practice.