**Pharmacy Technician Confidence and Perceptions Towards the Expansion of Advanced Technician Services**

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**Background:** Pharmacy technicians are essential for optimal functionality of a pharmacy. The current initiative to shift a pharmacist’s priorities from dispensing to providing patient care services requires pharmacy technicians to enhance their role as well. Virginia has required pharmacy technicians to receive national certification, although not every state has followed suit. As a result, technicians in Virginia have the opportunity to perform advanced level tasks within their practice sites. There is limited data available concerning a pharmacy technician’s confidence and perception of the advancement of their services.

**Objective:** To evaluate the perceptions of pharmacy technicians toward conducting advanced technician services and to identify the determinants of pharmacy technicians’ confidence towards the expansion of technician services and to analyze willingness of pharmacy technicians to receive additional training in advanced technician services.

**Methods:** This study was a prospective cohort investigational study using Qualtrics® survey methodology. A literature review was completed by the investigators to identify advanced technician services and develop the survey. The 37-question survey assessed experiences as a pharmacy technician, perceptions of and confidence in performing advanced pharmacy technician services, and willingness to undergo training. Survey questions consist of multiple choice, select all that apply, and free response. The survey utilized skip-logic and display-logic to prompt survey responders throughout the survey. Demographics included age, setting(s) worked, years worked, race, ethnicity, certification, gender, and highest level of education. A list of emails of pharmacy technicians was purchased from the Virginia State Board of pharmacy for survey distribution. Prior to dispersal, the survey was distributed to a small group of pharmacy technicians to conduct a pre-test. Once feedback was received and implemented from the pre-test, the survey was distributed over the course of 4 weeks. A follow up email was sent at week 2 after the initial email and during the final week of the data collection period. No personal identifiers were collected from survey responses. Only survey responders 18 years of age and older were included in the study results. The data was analyzed using descriptive statistics and multivariate and bivariate analysis.

**Results:** The survey was distributed to 11,850 emails. Of these, 195 emails bounced, and 6 duplicate emails were detected. 1219 response rates were collected, determining the sample size. The response rate to the survey was 10.5%. The mean age of survey respondents was 38 + 13.3. 79.2% of respondents were certified by the Pharmacy Technician Certification Board (PTCB), 11.8% were certified by the National Healthcare Association Exam for the Certification of Pharmacy Technicians (NHA/ExCPT). This category also included pharmacy interns and technicians in training. 9% of survey respondents had state certifications and were grandfathered into the current certification requirements. Years worked as a pharmacy technician was assessed. 348 survey respondents worked for 1-3 years, 201 respondents worked for 4-6 years, 148 respondents worked for 7-10 years, and 415 respondents worked for more than 10 years. The 4 largest work pharmacy settings were as follows: 265 pharmacy technicians worked in large chain community pharmacies, followed by 242 respondents who stated they worked for mass merchandiser or supermarket pharmacy, 174 worked for non-government hospital/health system, and 105 worked for independent pharmacies. Other pharmacy work settings were also assessed. Responses from technicians not currently involved in advanced technician services showed that they do believe that pharmacy technicians have a role in the following services: administering immunizations (72.2% n=668), conducting point of care testing (75.20% n=742), medication therapy management (71.5% n=740), recording verbal prescription orders (70.1% n=735), final product verification (57.80% n=827), prior authorizations (86.20% n=225) and managing inventory (95.70% n=94). Survey respondents with more years of experience working as a pharmacy technician were more willing to undergo additional training than those who did not have as many years of work experience (*p =* 0.28). Pharmacy technicians with PTCB certification were more confident in their ability to perform the following services: final product verification (*p*<0.001), recording verbal non-controlled prescriptions (*p*=0.004), medication reconciliation (*p*=0.001) and managing inventory (*p*<0.001). 73.2%% of survey respondents stated that they would be willing to undergo additional training in order to complete advanced technician services. 20.9% said they may be willing, and 5.9% stated they would not be willing to undergo additional training. Of the survey respondents who stated maybe or no as their answer, 12.36% stated they would need a raise in salary in order to encourage them to undergo additional training, and 10.91% stated that the training should be paid for by their employer.

**Conclusion:** Pharmacy technicians with PTCB certification are more confident in performing advanced technician services, and overall, pharmacy technicians believe they have a role in advanced technician services which will provide benefit as pharmacists begin to shift their efforts from dispensing to patient care services. Entrusting more advanced roles to a pharmacy technician can help support the advancement of their profession, and provide pharmacists the opportunity to focus additional time and effort on patient care.