

Report of the 2018 Maryland Pharmacy Technician Consensus Conference

Maryland Pharmacy Technician Consensus Conference Steering Committee

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Introduction

The Maryland Pharmacy Coalition (MPC) (Appendix A) voted unanimously, in 2017, to support legislation for the State of Maryland that would mandate requirements consistent with the recommendations of the 2017 National Pharmacy Technician Stakeholder Consensus Conference.¹ This decision stemmed from recognition that enhancing the educational requirements for pharmacy technicians will increase medication safety for Maryland patients and support additional direct patient-care services by pharmacists.

The 2018 Maryland Pharmacy Technician Consensus Conference (June 21, 2018) was designed to seek broad consensus in support of the action taken by the MPC and to identify specific issues that will need to be addressed as pharmacy leaders in the state move forward on the matter.

Background

The 2017 National Pharmacy Technician Stakeholder Consensus Conference¹ endeavored to resolve issues related to pharmacy technician education and certification. The event was sponsored by the Pharmacy Technician Certification Board (PTCB) and planned in collaboration with the Accreditation Council for Pharmacy Education (ACPE) and the American Society of Health-System Pharmacists (ASHP) under the guidance of an advisory committee representing all major branches of pharmacy.

The consensus recommendations from the national conference focused on defining pharmacy technician education requirements, certification, entry-level knowledge, advanced roles, and state laws and regulations. Most conferees agreed that national standards should guide technician education and that pharmacy technician education programs should be accredited.

At the conclusion of the 2017 conference, five participants with national responsibilities in various sectors of pharmacy, commented on the event's value in candidly exploring unsettled issues and reaching conceptual agreement on important changes that should be pursued

relating to the education, certification, and registration or licensure of pharmacy technicians. They emphasized the urgency of building on this stakeholder consensus event and not allowing momentum to diminish.

Design of the Maryland Pharmacy Technician Consensus Conference

A Steering Committee (Appendix B) for the conference was convened consisting of appointees from each of the sponsoring organizations (Appendix C), including the Maryland pharmacy associations and schools of pharmacy, as well as the Maryland Board of Pharmacy. The Steering Committee met every other week beginning in January 2018 until the conference in late June 2018. Significant support was provided by a Planning Committee consisting of Health-System Pharmacy Administration residents from The Johns Hopkins Hospital and Johns Hopkins Home Care Group (Appendix D).

The Steering Committee modeled the framework and objectives for the Maryland event closely after that of the 2017 national conference. A preconference survey was distributed to conference invitees as well as members of Maryland pharmacy associations, Maryland schools of pharmacy, and the Maryland Board of Pharmacy. The Steering Committee determined the conference agenda and invited speakers, and solicited invitee nominations from Maryland pharmacy association executives, the deans of schools of pharmacy in the state, and the Maryland Board of Pharmacy. The conference attendees are listed in Appendix E.

The conference featured seven plenary sessions and one work-group session as summarized below. During the work-group session, conference attendees were divided into four small groups to discuss specific issues and draft recommendations based on the discussions. The conference concluded with polling attendees on their level of agreement with the recommendations from the work groups.

Plenary Sessions

Interests of the Public

Ed L. Sperry, the public representative on the Idaho Board of Pharmacy, opened the conference with a focus on how pharmacy technician competency directly affects the public's confidence in pharmacy services. He noted that many consumers already believe pharmacy technicians complete a standardized educational program. Sperry emphasized the necessity of expanding the role of pharmacy technicians in order to encourage their retention in the pharmacy workforce and support clinical integration of pharmacists in health care. Pharmacists should concentrate on the patient-care facets of pharmacy while pharmacy technicians should tend to the routine operational facets of pharmacy. Sperry concluded by urging conferees to advocate, as a united pharmacy front, with Maryland legislators to allow for more advanced pharmacy technician roles that are supported by a more highly structured educational process.

Summary of National Conference and Follow-up Activities

William A. Zellmer, president of Pharmacy Foresight Consulting, summarized the outcomes of the national conference,¹ as a point of reference for discussions in Maryland. Surveys, in advance of the 2017 event, of pharmacy opinion leaders and invited conference participants, showed broad agreement that (1) pharmacy technicians should be educated and regulated in a manner that ensures public safety, (2) minimum qualifications should be established for pharmacy technicians, (3) the nature of pharmacist oversight should be specified, and (4) there exists core knowledge among pharmacy technicians in all areas of practice.

Conferees at the national event agreed that a task analysis of technicians, inclusive of all areas of practice, should be the basis for educational standards and certification, which serve to assure competency. The conference identified consensus that (1) pharmacy technician education programs should be accredited based on defensible standards, (2) pharmacy technician education should precede certification, (3) pharmacy technician certification should precede state board of pharmacy registration or licensure, (4) a concerted effort should be made to reduce variability in state laws and regulations on pharmacy technicians, and (5) a coalition representing all stakeholders should pursue the consensus recommendations. Subsequent to the national conference, a broad-based advisory committee concluded that initial follow up efforts should focus on state adoption of uniform requirements for pharmacy technician education for entry-level practice.

Zellmer noted that a comparable national consensus conference 30 years earlier made similar recommendations. Key developments since the conference of three decades ago include immense growth in prescription volume, greatly expanded use of pharmacy technicians in community pharmacies, creation of pharmacy technician certification programs, uniform Doctor of Pharmacy education for pharmacists, and a consensus vision for pharmacist practice that focuses on patient care and fostering appropriate use of medicines. He stated that Maryland has a unique opportunity for professional leadership on pharmacy technician issues—an opportunity that can be grasped by acting in the best interest of the public and by attending to the desire of pharmacists to optimize use of their knowledge, skills, and abilities in patient care.

Update on Standards for Pharmacy Technician Education

Sheri Roumell, a lead accreditation surveyor of pharmacy technician education programs and a participant in recent revision of the accreditation standards, discussed the new ASHP/ACPE Accreditation Standards for Pharmacy Technician Education and Training Programs.² Each of the 15 standards is divided into three sections: (1) competency expectations, (2) structure and process to promote achievement of competency expectations, and (3) assessments of standards and key elements. Entry-level and advanced-level programs are defined, and key elements for each standard are outlined. Entry-level programs now consist of 400 hours (compared to 600 hours previously); advanced-level programs require an additional 200 hours. The new standards provide additional latitude in how hours are allocated among (1) didactic,

(2) simulation, and (3) experiential activities. These changes support entry-level education for all practice settings and allow greater flexibility by program providers. An increased focus on simulations and real-world experience better prepares pharmacy technicians for their future careers.

Perspectives from Pharmacy Practice Sectors

Independent Pharmacy Practice: Mark Ey, Vice President of Operations for the CARE Pharmacies Cooperative, said that an important concern for independent community pharmacies is the costs involved in requiring pharmacy technicians to complete accredited education or to become certified. In this sector of practice, advanced pharmacy technician skills are needed in inventory management, billing and reimbursement, and compounding. The payment model for independent pharmacies poses serious impediments with respect to new requirements for technicians.

Community / Chain Pharmacy Practice: Laura Churns, Director of Pharmacy Legislative and Regulatory Affairs for Albertsons Companies, discussed the increased need for pharmacy technicians to take on more advanced roles to allow time for pharmacists to assume clinical responsibilities in the community practice setting. She also stated that many chain pharmacies have company-specific education and training that allows their technicians to prepare for more advanced roles.

Hospital / Health-System Pharmacy Practice: Karla Evans, Director of Pharmacy for MedStar Southern Maryland Hospital Center, identified required and desired entry-level skills for pharmacy technicians in the hospital and health-system setting. She emphasized the need for technician education in sterile compounding, infection prevention, and basic medication knowledge. Hospitals and health systems need pharmacy technicians who are prepared at both the entry-level and advanced levels.

Overall, these three presentations provided insight on shared goals with respect to the scope of pharmacy technician responsibilities. The presentations helped the conference search for common ground across pharmacy sectors on how to assure the public that technicians are prepared appropriately for their growing responsibilities.

Preconference Survey Overview and Results

Tara Feller, past-Chair of the Maryland Society of Health-System Pharmacy (MSHP) Pharmacy Technician Committee and member of the conference Steering Committee, summarized the results of the preconference survey. The survey was modeled after the preconference survey for the national conference and modified to address Maryland stakeholders. The 48-question survey was distributed to conference invitees and the members of all host organizations. The survey had seven focus areas: (1) defining pharmacy technicians, (2) required knowledge, skills, and abilities for entry-level pharmacy technicians, (3) education, (4) certification, (5) state laws

and regulations, (6) advanced practice, and (7) moving forward. Each of the survey questions was answered with one of seven options ranging from Strongly Agree to Strongly Disagree.

One-hundred twenty-five complete responses were received with respondents representing all sectors of pharmacy. Community pharmacists (30%) and hospital pharmacists (24%) represented the majority of respondents. For this report, the responses of “Strongly Agree”, “Agree”, and “Somewhat Agree” were combined to represent agreement with a statement, and responses of “Strongly Disagree”, “Disagree”, and “Somewhat Disagree” were combined to represent disagreement with a statement.

Overall, 43 of the 48 statements achieved agreement levels of 90% or greater, and 47 of the 48 achieved a level higher than 75% (Table 1). There was a strong level of agreement that (1) pharmacy technician education programs should be accredited based on defensible standards, (2) pharmacy technician education should precede certification, (3) pharmacy technician certification should precede state board of pharmacy registration or licensure, (4) a concerted effort should be made to reduce variability in state laws and regulations on pharmacy technicians, and (5) a coalition representing all stakeholders should pursue the consensus recommendations.

Breakout Group Discussions

The presentations and results of the preconference survey guided the breakout group discussions. The 76 attendees were split into four groups and assigned one of the following topics related to the 2018 ASHP/ACPE Accreditation Standards for Pharmacy Technician Education and Training Programs: (1) assessment of the standards or (2) moving forward with the standards. Because of significant overlap in content discussed, the following is a synthesis of key points from all groups.

Overall, there was agreement that standardized training for new pharmacy technicians should exist and that this standardization would increase employer and patient confidence. Much of the ensuing discussion revolved around the details of how standardized training would be implemented recognizing that the new ASHP/ACPE standards provide a starting point.

It was suggested that the current lack of accreditation standards results in significant variation in fundamental skill sets among the entry-level pharmacy technicians. A review of pass rates for the PTCB exam demonstrates an additional concern. During the last 3 years, the pass rates for Maryland first-time test takers, has averaged 55%. Most pharmacy technicians sitting for the examination have not completed a standardized course of study. As a result, students are set up for failure and many are discouraged from becoming pharmacy technicians.

Breakout groups discussed that the ASHP/ACPE standards create universal training program expectations that would ensure each technician is equipped with fundamental knowledge and skills that can be validated by a national examination. Thus, employers could be more confident with new hires and potentially have a more efficient onboarding process. Also, it was discussed

that pharmacy technicians would be better suited to take on additional responsibilities that will support clinical advancement for all members of the profession. The two-tiered educational system (entry-level and advanced-level) incentivizes technicians to progress in their career and could potentially increase morale across the profession.

The tiered educational system was welcomed by many breakout group members, as it provides an opportunity for baseline and specialized training to meet needs across the spectrum of pharmacy practice settings; however, there were concerns shared as well. Representatives from the community pharmacy practice setting described the potential burden of implementing the ASHP/ACPE standards for internal (company-specific) pharmacy technician training programs, as the broad education domains develop skill sets that may not be relevant to the community practice setting. Moreover, representatives across all pharmacy practice settings were apprehensive about the costs associated with accreditation renewal and restructuring the curricula to comply with the accreditation standards which might force certain pharmacy technician training programs to close. For programs that remain open, the additional costs may be passed onto students, which may decrease enrollment. Taken together, there is a potential risk of the pharmacy technician labor pool shrinking.

Additionally, there was discussion concerning grandfathering current pharmacy technicians. The questions being raised were should, over time, all pharmacy technicians be required to complete a standardized training program and/or sit for one of the two certification examinations? There was a strong level of interest and support to establish one level of training for all pharmacy technicians. (Note: This is the intent of the new entry-level accreditation standard – it applies to all pharmacy technicians entering practice; the advanced standard is optional.) This was balanced with the practical understanding that many current pharmacy technicians have been in practice for a number of years and are held to standards of performance consistent with the needs of practice by employers. The groups discussed that these technicians could be ‘grandfathered’ in to avoid reducing the labor pool.

In summary, the breakout groups identified the following concerns, uncertainties, or fears that will need to be addressed or resolved in order to enhance the education and training requirements for pharmacy technicians in Maryland:

- A significant portion of training is “on the job training” because of site-specific requirements. It would be difficult to standardize such training.
- Some pharmacy technician educational programs may find the cost of accreditation prohibitive, which may reduce the number of programs.
- Requiring a standard curriculum and completion of an accredited program would be costly and time consuming for pharmacy technicians.
- There may not be enough practice sites willing to take pharmacy technician students for externship experiences.
- New laws or regulations will be required, which will be complex and time-consuming.

- If pharmacy technicians (and pharmacists) have additional responsibilities, liability and malpractice insurance costs may increase.
- Enhanced educational requirements for pharmacy technicians may create market demands for higher salaries, which could reduce the number of positions for pharmacy technicians.
- Maryland Board of Pharmacy regulations do not currently allow pharmacy technicians and pharmacists to practice at the top of their license/registration.
- A requirement for accredited education will necessitate a phase-in process to avoid a pharmacy technician shortage.

The following views were offered in breakout discussions in response to key concerns about requiring accredited education:

- All pharmacy technicians need the same foundational knowledge, skills, and abilities to enter practice regardless of practice site. Procedural training will always be required to explain site-specific practices. Advanced training will assure competency for those involved in unique roles, such as sterile compounding.
- Pharmacy technicians are the building blocks for advancing pharmacist practice. Pharmacists will assume additional professional responsibilities for the practice of pharmacy and patient care while well-trained pharmacy technicians can support the business aspects of pharmacy, allowing both to practice at the top of their license or registration.
- The accreditation standards for pharmacy technician education have changed. Four-hundred (400) hours are now needed for entry-level practice (compared to 600 hours in the past) with an additional 200 hours required for advanced roles. The expense of education for entry-level practice will generally be the responsibility of the trainee and not the employer. Education provided in accredited sites will support access to loans and financial aid. Accredited educational programs will assure a quality educational experience and a higher pass rate for certification examinations. It is quite likely that the pharmacy technician programs that currently exist in community colleges, vocational programs, and high schools could easily meet the new standards over the next two to three years.
- Completion of accredited education will increase employer confidence in new hires and allow for a more efficient on-boarding process.
- If Maryland passes legislation requiring educational programs to be accredited, all new pharmacy technicians must complete an entry-level accredited educational program prior to state registration after an agreed upon phase-in period.

Final Conference Polling

Each breakout group was asked to draft consensus statements based on their discussion. All conferees voted whether they strongly agreed, agreed, disagreed, or strongly disagreed with

the statements in the final large group polling session. The consensus statements and level of agreement with each one are outlined in Table 2.

Overall, there was agreement that standardized training for new pharmacy technicians should exist and that this standardization would increase employer and patient confidence in pharmacy technicians. The current variability in pharmacy technician education results in significant variation in fundamental skill sets among entry-level pharmacy technicians. Compliance with the ASHP/ACPE accreditation standards for pharmacy technician education would ensure that pharmacy technicians are equipped with fundamental knowledge and skills that could be validated by a national certification examination. The availability of entry-level and advanced-level educational standards recognizes differing needs among practice sites and supports a mechanism for pharmacy technicians to advance in their careers.

However, there was distinction between the priorities of independent and community pharmacy practice, retail, and hospital and health-system pharmacy practice. This difference was elucidated during the polling at the conclusion of the conference about whether a 3-tier registration model should be implemented. The same question was polled three times, once with all conferees, once with only those conferees in community and independent practice settings, and once with only those conferees in hospital and health-system practice settings. Community and independent pharmacy practice representatives preferred the 3-tier registration model allowing for grandfathering of those previously trained by a non-accredited program (tier 1), certified entry level technicians (tier 2), and certified advanced level pharmacy technicians (tier 3). Hospital and health-system pharmacy practice representatives disagreed with this tiered approach (Table 2). Nevertheless, the majority of conferees agreed that State Boards of Pharmacy should ultimately determine education requirements for pharmacy technicians and that once determined, these requirements should be implemented over a three year period (Table 2).

Conclusion

Members of the conference Steering Committee believe that the perceived barriers to a requirement for accredited education for pharmacy technicians in Maryland can be addressed successfully over a two- to three-year implementation period. The benefits that will be achieved through this requirement are improved educational programs, enhanced competency of pharmacy technicians, enhanced public and employer confidence in pharmacy technicians, a larger proportion of pharmacy technicians who pursue pharmacy as a long-term career, and advanced patient-care roles for pharmacists.

Members of the Steering Committee for the conference believe that Maryland legislation should be drafted, consistent with the unanimous vote of the Maryland Pharmacy Coalition (MPC) that would require:

- Pharmacy technician educational programs to be nationally accredited.

- Pharmacy technician educational programs to follow the curricular requirements of the ASHP/ACPE accreditation standards.
- Pharmacy technicians wanting to enter practice by 2022 to complete a nationally accredited educational program.
- Pharmacy technicians completing accredited education to become certified under one of the two national certification programs.
- The Board of Pharmacy to monitor the certification pass rate for pharmacy technicians.

Appendices

Appendix A: Maryland Pharmacy Coalition (MPC)

Full Members

- Maryland Pharmacists Association
- American Society of Consultant Pharmacists – Maryland Chapter
- Maryland Pharmaceutical Society
- Maryland Society of Health System Pharmacy
- University of Maryland Baltimore School of Pharmacy Student Government Association
- University of Maryland Eastern Shore School of Pharmacy Student Government Association
- Notre Dame of Maryland University School of Pharmacy Student Government Association

Affiliate Members

- University of Maryland School of Pharmacy
- University of Maryland Eastern Shore School of Pharmacy
- Notre Dame of Maryland University School of Pharmacy
- DC Chapter of American College of Clinical Pharmacy

Appendix B: Steering Committee Members

- Daniel Ashby – Chair, Maryland Society of Health-System Pharmacy
- Tosin David – University of Maryland Eastern Shore School of Pharmacy
- Tara Feller – Maryland Society of Health-System Pharmacy
- Valerie Hogue – Notre Dame of Maryland University School of Pharmacy
- Lenna Israbian-Jamgochian – Maryland Association of Chain Drug Stores
- Neil Leikach – Maryland Pharmacists Association
- Brian Logan – Maryland Board of Pharmacy
- Jill Morgan – University of Maryland School of Pharmacy
- Nkem Nonyel – Maryland Pharmacy Coalition and Maryland Pharmaceutical Society

Appendix C: Sponsoring Organizations

- Maryland Board of Pharmacy
- Maryland Pharmacists Association (MPhA)
- Maryland Society of Health-System Pharmacy (MSHP)
- Notre Dame of Maryland University School of Pharmacy
- University of Maryland School of Pharmacy
- University of Maryland Eastern Shore School of Pharmacy

Appendix D: Planning Committee Members

All of these individuals are residents from The Johns Hopkins Hospital and Home Care Group

- Laura Avino – Chair, PGY2 Health-System Pharmacy Administration Resident
- Michael Goldenhorn – PGY2 Health-System Pharmacy Administration Resident
- Ben Iredell – PGY2 Medication Systems and Operations Resident
- Felix Lam – PGY1 Health-System Pharmacy Administration Resident
- Dorela Priftanji – PGY1 Health-System Pharmacy Administration Resident
- Tricia Schneider – PGY1 Community Health-System Pharmacy Administration Resident
- Thomas Walczyk – PGY1 Medication Systems and Operations Resident

Appendix E: Attendees to the Maryland Pharmacy Technician Consensus Conference

Daniel Ashby	G. Lawrence Hogue	Andrea Pumphrey
April Baker	Valerie Hogue	Nancy Richard
Sharon Baker	Shelby Holstein	Sheri Roumell
Matthew Balish	Aliyah Horton	Kris Rusinko
Kathy Benderev	Lenna Israbian-Jamgochian	Lisa Sanderoff
Ashley Bivin	Steve Jurch	Jeremy Sasser
Etzion Brand	Tamara Kozlowski	Rick Seipp
Ciara Bryant	Rachel Kruer	Amelia Sherman
Nicole Bryant	Dixie Leikach	Matthew Shimoda
David Byrd	Neil Leikach	Jermaine Smith
Laura Churns	Anne Lin	Stephanie Smith-Baker
Nick Cicco	John Long	Deena Speights-Napata
Richard D'Ambrisi	Suncereray (Sunny) Mason	Ed Sperry
Tosin David	Ashlee Mattingly	Adrienne Taylor
Richard DeBenedetto	Jill McCormack	Cailey Locklair Tolle
Marisol De Leon	Barbara McHenry	Hoai-An Truong
Rachel Dewberry	Ashley Moody	Paul Vitale
Natalie Eddington	Sherry Moore	Maddy Voytek
Karla Evans	Jill Morgan	Cathy Walker
Thomas Evans	Todd Nesbit	Chai Wang
Mark Ey	Christina Nguyen	Daniel (Ray) Weber
Tara Feller	Jane Nguyen	Andrew Wherley
Tomson George	Nkem Nonyel	Katie York
Carla Gill	Travis Oneukwusi	William Zellmer
Christine Guay	Stephanie Oster	
Janet Hart	Marie-Therese Oyalowo	

Table 1: Preconference Survey Statements and Level of Agreement

Consensus Statement	Level of Agreement*
Develop a contemporary definition of an entry-level pharmacy technician, which differentiates them from other pharmacy support personnel.	90%
The Maryland Board of Pharmacy should work with other state boards of pharmacy to adopt standardized terminology that defines different categories of pharmacy support personnel and their associated scope of work.	93%
The Maryland Board of Pharmacy should protect the title of pharmacy technician, ensuring that only those that have completed required education and training may use the title.	97%
The employee will be considered a technician-in-training during the period of completion of education and training.	95%
The areas that should be included in entry-level knowledge, skills, and abilities of pharmacy technicians are:	
• Patient and medication safety	98%
• Maintenance of confidentiality	97%
• Personal and inter-professional knowledge and skills	93%
• Professional knowledge and skills	95%
• Calculations	97%
• Processing of orders	98%
• Medication use process	91%
• Screen prescriptions within scope	93%
• Proper handling of hazardous drugs	94%
• Information technology (including medication safety)	91%
• Quality principles	92%
• Regulatory	89%
• Inventory management	91%
• Basic pharmacology	87%
• Understanding sterile and non-sterile compounding	85%
• Billing	85%
• Demonstration of understanding of non-traditional roles	80%
The profession should move urgently towards the development and adoption of national standards for pharmacy technician education and training.	
	89%

The Maryland Board of Pharmacy should require employees seeking the entry-level pharmacy technician designation to complete a nationally accredited education and training program.	79%
The activities that can be performed by an entry-level pharmacy technician have been adequately defined in the January 2018 Draft ASHP/ACPE Pharmacy Technician Accreditation Standard.	59%
The state of Maryland should support a target implementation of the national standards for pharmacy technician education at 3 to 5 years after adoption of the standard.	79%
The Maryland Board of Pharmacy should require new pharmacy technicians to complete a national pharmacy technician certification exam for registration or licensure.	79%
The Maryland Board of Pharmacy should require pharmacy technicians to maintain national certification for continued registration or licensure.	82%
The Maryland Board of Pharmacy should provide a system to recognize experienced pharmacy technicians, which does not compromise the basic competencies required of a certified pharmacy technician.	86%
The variability of state regulations regarding pharmacy technicians should be minimized, while maintaining the required standards to ensure patient safety	92%
National standards should not prevent states from innovating and expanding scope of practice beyond established entry-level standards to advance practice and improve patient safety and care.	95%
The evolution of the state of Maryland's laws and regulations regarding pharmacy technicians should be founded on ensuring patient/public safety.	96%
National standards should be framed in the context of pharmacy technician practice being under the purview of the pharmacist.	92%
The Maryland Board of Pharmacy should continue to require registration for all individuals who embark upon their initial entry into the profession of pharmacy.	94%
The Maryland Board of Pharmacy should require that pharmacy technicians complete continuing education or other professional development activities for continued registration and/or licensure	93%
The Maryland Board of Pharmacy should include a pharmacy technician on the board.	86%

The level of urgency to achieving state-to-state consistency in regulation of pharmacy technician's scope of practice, education, training, certification, and licensure or regulation is high.	76%
The Maryland Board of Pharmacy should require pharmacy technicians to be licensed based on specific criteria including accountability and administrative liability	85%
Clearly articulate and communicate their vision for advanced pharmacy technician practice and disseminate the vision to appropriate stakeholders.	95%
Specific, advanced-level educational programming for pharmacy technicians is needed, available, and will continue to evolve as needs within the profession are identified (e.g., sterile compounding, controlled substances risk management, quality assurance, informatics).	91%
Bridging programs should be developed and offered to build competencies of pharmacy technicians that are currently in the workforce and would like to advance their skills.	92%
In developing standards for advanced pharmacy technicians, the profession must recognize that there are technicians currently practicing at this level and acknowledge the appropriate pathway for their continued development.	96%
The profession should maintain focus and energy toward developing entry-level standards for technician education and training, with the expectation that advanced level competencies will evolve over time.	91%
Develop credentials for technicians who perform advanced roles beyond entry-level practice.	89%
The profession should encourage pharmacy technician inclusion, representation, and membership in professional pharmacy organizations (at state and national levels)	92%
Be transparent in its message, communicating the priority of public/patient safety, taking ownership of identified issues, assuming commitment to change, ensuring accountability, and reinforcing the positive contributions of pharmacy technicians to achieving optimal medication use	96%
The profession should develop a communication plan to disseminate the vision and achieve buy-in from all Maryland stakeholders (e.g., pharmacists, pharmacy technicians, legislative and regulatory bodies, employers, payers, public).	92%

The conference planners should establish a coalition with broad representation to take forth the recommendations from the Maryland Pharmacy Technician Stakeholder Consensus Conference.	91%
The profession should move urgently towards the development and adoption of national standards for pharmacy technician education and training.	89%
All participants in the Maryland Pharmacy Technician Stakeholder Consensus Conference have a responsibility to work toward achieving the consensus recommendations from the conference	90%

*Agreement is defined as a respondent selecting “Strongly Agree”, “Agree”, or “Somewhat Agree”.

Table 2: Consensus Statements Developed by Work-Group Session and Level of Agreement

Consensus Statement	Level of Agreement* (Number of Responses)	Number of Respondents
There should be a standardized and accredited education requirement for all new pharmacy technicians.	80% (47)	59
There should be standardized and accredited education requirements for both entry level pharmacy technicians and advanced level pharmacy technicians.	74% (43)	58
A required minimum training standard will increase employer confidence in new hires and allow for a more efficient onboarding process.	72% (42)	58
The ASHP/ACPE standard should be used as the education standard.	67% (39)	58
ASHP/ACPE Pharmacy Technicians Accreditation Standards should allow programs flexibility in what technicians training standards are emphasized to enable more specialized training while ensuring trainees are exposed to all fundamental knowledge areas.	81% (46)	57
State Board of Pharmacies should determine the education standard.	78% (39)	50
The new education requirement should be implemented over a 3 year period.	83% (48)	58
Current pharmacy technicians should be educated on the impact of these changes.	98% (52)	53
If certification becomes a requirement in Maryland, current pharmacy technicians should be given 5 years to complete certification exam or a supplemental education program.	47% (27)	58
If certification becomes a requirement in Maryland, all new technicians need to be certified through a qualified national certification exam by 2020.	59% (35)	59
If certification becomes a requirement in Maryland, currently registered pharmacy technician could continue in their role without sitting for a certification exam.	58% (32)	55

If certification becomes a requirement in Maryland, all pharmacy technicians currently registered with the Maryland Board of Pharmacy need to be certified via national certification exam by 2023.	44% (20)	45
If Maryland passes legislation requiring all education programs to be accredited, all new technicians should complete an entry level accredited training program within 3 years of passed legislation.	82% (40)	49
If Maryland passes legislation requiring all education programs to be accredited, all new technicians should be required to complete an entry level accredited training program within 5 years of the legislation passing.	45% (25)	56
If Maryland passes legislation requiring all education programs to be accredited, currently registered pharmacy technician could continue in their role without the requirement to complete an accredited training program.	84% (46)	55
Maryland should learn from states that currently require accreditation regarding enrollment and timeline.	100% (55)	55
There should remain a mechanism by which new pharmacy technicians can register with the Maryland Board of Pharmacy after completion of a non-accredited education/training program.	39% (21)	54
A 3-tier technician registration model should be implemented if the ASHP/ACPE standard is adopted: a. Tier 1: Registered pharmacy technician ("grandfathered" or trained through a non-accredited technician training program) b. Tier 2: Certified entry level technician trained through an accredited program c. Tier 3: Certified advanced level technician through an accredited program	53% (31)	58
Independent and Community Pharmacists: A 3-tier technician registration model should be implemented if the ASHP/ACPE standard is adopted:	73% (19)	26

<p>a. Tier 1: Registered pharmacy technician ("grandfathered" or trained through a non-accredited technician training program)</p> <p>b. Tier 2: Certified entry level technician trained through an accredited program</p> <p>c. Tier 3: Certified advanced level technician through an accredited program</p>		
<p>Hospital and Health-System Pharmacists:</p> <p>A 3-tier technician registration model should be implemented if the ASHP/ACPE standard is adopted:</p> <p>a. Tier 1: Registered pharmacy technician ("grandfathered" or trained through a non-accredited technician training program)</p> <p>b. Tier 2: Certified entry level technician trained through an accredited program</p> <p>c. Tier 3: Certified advanced level technician through an accredited program</p>	<p>33% (8)</p>	<p>24</p>
<p>Ownership to advance this process would be accomplished through the Maryland Pharmacy Coalition (MPC) submitting legislation for calendar year 2019.</p>	<p>72% (41)</p>	<p>57</p>

*Agreement is defined as a respondent selecting "Strongly Agree" or "Agree".

References

1. Zellmer WA, McAllister EB, Silvester JA, et al. Toward uniform standards for pharmacy technicians: Summary of the 2017 Pharmacy Technician Stakeholder Consensus Conference. *Am J Health-Syst Pharm.* 74: e377-91.
2. ASHP/ACPE Accreditation Standards for Pharmacy Technician Education and Training Programs. American Society of Health-System Pharmacists: Accreditation Council for Pharmacy Education. Published July, 10, 2018.