

Abstract:

Background: The evolving healthcare landscape, catalyzed by the Affordable Care Act in 2010, has expanded the roles of community pharmacists, leading to an increased workload and challenges in balancing traditional dispensing duties with clinical services. Pharmacy technicians have historically supported pharmacists in dispensing activities, but there is a growing need to leverage their capabilities in broader clinical roles. The integration of pharmacy technicians as pharmacist extenders presents opportunities to enhance patient care, operational efficiency, and revenue generation in community pharmacies.

Objective: This study aims to assess the current involvement of pharmacist technicians in community health screenings, evaluate their impact on overall health outcomes, explore perceptions of stakeholders, and identify best practices for integrating them into screening programs effectively.

Conclusion: Pharmacy technicians play a vital role in community health screenings by assisting pharmacists in preparing medications, conducting health assessments, and organizing screenings. Despite concerns about safety and role ambiguity, technicians can contribute significantly to public health initiatives. Novel duties, such as point of care testing and patient information gathering, showcase their potential to enhance patient care and expand pharmacist reach, especially in underserved areas. The participation of pharmacy technicians in screening programs can lead to early detection, improved patient education, and better health outcomes for the community at large.

Keywords: Pharmacy technicians, expanding roles, community pharmacy, community pharmacy

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Introduction:

Community pharmacists are witnessing a transformation in their responsibilities as the healthcare landscape undergoes a shift towards emphasizing the quality of care, a change catalyzed by the implementation of the Affordable Care Act in 2010. This legislation has played a pivotal role in broadening the scope of pharmacists' duties by enabling them to play a more active role in coordinating patient care and managing medication therapy. While this development has been a significant step forward for the pharmacy profession, pharmacists are now grappling with an increasing workload as they strive to balance their traditional dispensing duties with the provision of clinical services. According to a survey conducted by the American Association of Colleges of Pharmacy (AACP) in 2014, 66% of community pharmacists reported a rise in their workload compared to the previous year [1]. Furthermore, 54% of pharmacists noted that this increased workload has had a detrimental impact on the amount of time they can dedicate to direct patient interactions, while 35.5% expressed concerns about the potential compromise in the quality of care they deliver.

On average, community pharmacists allocate approximately 75% of their work hours to patient care services related to dispensing, encompassing activities such as liaising with healthcare providers, providing medication counseling, and preparing prescriptions. Traditionally, pharmacy technicians have supported pharmacists in delivering patient care services associated with dispensing that do not necessitate professional judgment [2]. The remaining 25% of a community pharmacist's daily schedule is divided between patient care services unrelated to dispensing (13%), and business management tasks (12%). These non-dispensing patient care services include billable activities like conducting comprehensive medication reviews, assessing medication requirements, and adjusting dosages. By expanding the provision of patient care services not linked to dispensing, pharmacies can bridge the gap between the actual cost of dispensing and the reimbursement received, thereby enhancing revenue streams [3]. This strategic shift towards prioritizing clinical services for revenue generation implies that pharmacists should reduce their time spent on dispensing activities and allocate more resources to delivering clinical services. One effective approach to achieving this transition without overburdening pharmacists is to leverage pharmacy technicians as extenders, delegating to them a broader array of technical responsibilities. These tasks should encompass both conventional dispensing functions

and innovative non-traditional roles, such as administering vaccinations and assuming administrative positions. To justify the expanded role of pharmacy technicians, pharmacists must acknowledge the historical evolution of pharmacy technician roles, comply with relevant laws and regulations governing pharmacy technicians, and effectively utilize technicians as valuable extensions of the pharmacist's role [4].

Objectives:

The main objectives of this review are:

- 1. To assess the current involvement of pharmacist technicians in community health screenings and identify any gaps or areas for improvement.
- 2. To evaluate the impact of pharmacist technicians' participation in these screenings on the overall health outcomes of the community.
- 3. To explore the perceptions of healthcare professionals, community members, and pharmacist technicians themselves regarding the role of pharmacist technicians in community health screenings.
- 4. To identify best practices and strategies for effectively integrating pharmacist technicians into community health screening programs.

Pharmacy technicians as pharmacist extenders in community health:

In order to further expand the scope of pharmacists' practice, it is imperative that pharmacists leverage the capabilities of their pharmacy technicians as extenders. As community-based pharmacists embrace evolving responsibilities, they are increasingly tasked with delivering a greater number of clinical services while concurrently managing traditional dispensing duties for a larger patient population within constrained timeframes. By fully harnessing the potential of pharmacy technicians, pharmacists can enhance patient engagement, optimize the delivery of clinical services, and streamline operational efficiency [5]. The concept of technicians as pharmacist extenders underscores the strategic deployment of pharmacy technicians in alignment with their comprehensive scope of practice to enable pharmacists to reach a broader patient base, enhance clinical outcomes, and boost revenue generation. The expanded scope of pharmacy technicians encompasses not only conventional support functions in dispensing but also extends to unconventional tasks such as administering immunizations, conducting technician accuracy checks, and facilitating Clinical Laboratory Improvement Amendments (CLIA)-waived screenings. Research indicates that pharmacy technicians exhibit the requisite proficiency and precision to effectively carry out these non-traditional responsibilities, thereby enabling pharmacists to dedicate more time to their clinical duties [6].

The role of pharmacist technicians in community health screenings:

Pharmacy technicians are integral to the provision of essential services to patients during community health screenings, as they work alongside pharmacists in preparing medications, verifying prescriptions, and educating patients about their medications [7]. In the context of community health screenings, pharmacy technicians may also be involved in conducting health assessments, measuring vital signs, and administering basic medical tests, all of which contribute to promoting public health and encouraging healthy lifestyle choices. Moreover, pharmacy technicians play a crucial role in organizing and coordinating community health events, such as blood pressure screenings, cholesterol tests, and diabetes screenings, which help to identify individuals at risk for various health conditions [8, 9].

However, despite their valuable contributions, community pharmacists have expressed reluctance towards utilizing pharmacy technicians due to concerns about public safety. This apprehension, coupled with the increasing number of pharmacy technicians, led to the U.S. Department of Health, Education and Welfare recommending in 1968 that pharmacy technicians undergo formal training in junior colleges and other institutions [10]. It is important to note that pharmacy technicians may not possess the ability to evaluate contextual information that could differentiate between selflimiting conditions and those requiring further intervention.

In certain Asian countries, there has been a blurring of roles between pharmacy technicians and pharmacists, with pharmacy technicians assuming responsibilities traditionally held by pharmacists, such as providing advice and recommending treatment. This ambiguity in roles has raised concerns about the appropriate scope of practice for pharmacy technicians [11, 12].

Novel duties of pharmacist technician:

In the field of pharmacy, there has been a notable rise in the provision of point of care testing (POCT) services to patients. These CLIA-waived POCTs, characterized as straightforward tests with minimal risk of producing erroneous results, are rapid tests that can be carried out by pharmacists and pharmacy technicians [13]. Among the common POCTs conducted by these professionals are tests for cholesterol levels, blood glucose levels, and International Normalized Ratio (INR). Patients increasingly seek swift and convenient clinical services, with many pharmacies and ambulatory care clinics offering shorter waiting times compared to traditional emergency rooms or acute care clinics, thereby driving up the demand for POCTs and related services. One proposed practice model involving pharmacy technicians entails having them schedule appointments for patients, collect patient information during appointments, and conduct CLIA-waived point of care tests [14]. This approach would enable pharmacists to attend to a larger number of patients as technicians handle the laboratory testing, leaving the clinical decisionmaking to the pharmacist. Common CLIA-waived point of care tests carried out in pharmacies encompass blood glucose, cholesterol, influenza, group B streptococcus, human immunodeficiency virus (HIV), and human papillomavirus (HPV) tests. As the scope of point of care testing in community pharmacies and ambulatory care settings expands, pharmacists will increasingly rely on their pharmacy technicians [15].

Another innovative role for pharmacy technicians could involve obtaining patient information, such as medication histories, when patients are admitted to urgent care clinics or visit community pharmacies either in-person or through telehealth services. This practice model would resemble that of a medical assistant or nurse gathering information before a doctor's appointment, with the pharmacy technician collecting pertinent background data prior to the pharmacist engaging with the patient [16]. Once again, this model would allow pharmacists to concentrate on medicationrelated issues and clinical recommendations by ensuring all necessary information is gathered before the patient interaction. In rural areas, telepharmacy could be leveraged to expand the pharmacist's reach to a broader patient population, enabling patients to receive care close to home through virtual means. The telepharmacy practice model would mirror in-person appointments but would be conducted via computer or phone [17].

Impact of pharmacist technicians' participation in screening programme on the overall health outcomes of the community:

Pharmacy technicians are integral members of the healthcare system, supporting pharmacists in a wide array of responsibilities, such as dispensing medications and offering guidance to patients. Their engagement in health screenings can yield significant benefits for community health [18]. Through the implementation of screenings for ailments like hypertension, diabetes, and cholesterol levels, pharmacy technicians can pinpoint individuals vulnerable to these health conditions at an early stage [19]. This proactive identification facilitates prompt interventions and therapies, thereby halting the advancement of these illnesses and enhancing the overall well-being of community. Furthermore, the pharmacy technicians are equipped to furnish patients with essential knowledge and tools, enabling them to manage their health effectively and make wellinformed choices regarding their treatment [20]. Furthermore, the participation of pharmacy technicians in screenings has the potential to foster positive impacts on public health by advocating for early detection and prevention of chronic ailments, ultimately culminating in improved health outcomes for the entire community.

Conclusion:

In conclusion, the role of pharmacist technicians in community health screenings is crucial for enhancing patient care, promoting public health, and improving overall health outcomes in the community. By leveraging the capabilities of pharmacy technicians as extenders to pharmacists, healthcare providers can optimize the delivery of clinical services, streamline operational efficiency, and reach a broader patient base. Pharmacy technicians play a vital role in conducting health assessments, administering basic medical tests, and coordinating community health events, contributing to the early detection and prevention of chronic ailments.

The study highlights the importance of integrating pharmacist technicians into community health screening programs effectively. By expanding the scope of pharmacy technicians to include novel duties such as CLIA-waived point of care testing and obtaining patient information, pharmacists can focus on clinical decision-making and medicationrelated issues. The participation of pharmacy technicians in health screenings not only facilitates early identification of health conditions but also empowers patients to manage their health effectively and make informed decisions about their treatment.

Overall, the findings underscore the significant impact of pharmacist technicians' involvement in community health screenings on enhancing public health, advocating for early detection, and improving health outcomes for the community. Further research and implementation of best practices are essential to maximize the potential of pharmacist technicians as valuable members of the healthcare team in community settings.

References:

- 1. Gaither CA, et al. Final report of the 2014 National Sample Survey of the Pharmacist Workforce to determine contemporary demographic, practice characteristics and quality of work-life. AACP. 2015 Apr 8; [Google Scholar]
- McCarthy R. Pharmacy Technicians. American Institute of the History of Pharmacy. 2016 https://aihp.org/wp-content/uploads/2018/08/4-Pharmacy-Technicians.pdf Available from: [Google Scholar]
- 3. CCI Training Center [Internet] Dallas (TX): CCI Training Center. [2019 May 10;];Pharmacy Technicians: The Past, Present and Future. 2015 Dec 26; http://www.acitroining.edu/blog/pharmacy

https://www.ccitraining.edu/blog/pharmacytechnicians-the-past-present-and-future/ Available From: [Google Scholar]

- 4. Pharmacy Technician Certification Board [Internet] How can I obtain a state license? Washington (DC): Pharmacy Technician Certification Board; 2019. Nov 23, [2019 May 12;]. https://www.ptcb.org/resources/cphttoolkit/state-regulations#.XUIpyS2ZNQI Available From: [Google Scholar]
- 5. Survey of Pharmacy Law Mount Prospect (IL): National Association of Boards of Pharmacy. 2017.
- Pharmacy Technician Certification Board [Internet] Credentialing Guidelines and Requirements. Washington (DC): Pharmacy Technician Certification Board; [2020]. [2019 May 13;]. https://www.ptcb.org/guidebook/ptcb-certifiedpharmacy-technician-cpht-program updated.

Available From: [Google Scholar]7. National Pharmacy Technician Association

- [Internet] The ExCPT Exam. Houston (TX): National Pharmacy Technician Association; 2010. [May 12;2019]. http://www.pharmacytechnician.org/excpt/ Available From: [Google Scholar]
- 8. McKeirnan KC, et al. Transforming pharmacy practice: Advancing the role of technicians. Pharmacy Today. 2018 Jun [Google Scholar]
- Miller RF, et al. Evaluation of Community Pharmacy Tech-Check-Tech as a Strategy for Practice Advancement. J Am Pharm Assoc. 2018 Nov [PubMed] [Google Scholar]
- 10.Andreski M, et al. The Iowa new practice model: Advancing technician roles to increase pharmacists' time to provide patient care services. J Am Pharm Assoc. 2018 May [PubMed] [Google Scholar]
- 11.Fera T, et al. Clinical support role for a pharmacy technician within a primary care

resource center. Am J Health Syst Pharm. 2018 Feb 1;75(3):139–144. [PubMed] [Google Scholar]

12. Yusuff K.B., Makhlouf A.M., Ibrahim M.I. Community pharmacists' management of minor ailments in developing countries: A systematic review of types, recommendations, information gathering and counseling practices. Int. J. Clin. Pract. 2021;75:e14424. doi:

10.1111/ijcp.14424. [PubMed] [CrossRef] [Google Scholar]

- 13.Pharmaceutical Services Negotiating Committee Advanced Services. [(accessed on 20 September 2016)]; Available online: https://psnc.org.uk/servicescommissioning/advanced-services/
- 14.Department of Health . The Pharmaceutical Services (Advanced and Enhanced Services) (England) Directions. The National Archives; London, UK: 2005. [Google Scholar]
- 15.Pharmaceutical Services Negotiating Committee Locally commissioned services. [(accessed on 20 July 2016)]; Available online: http://psnc.org.uk/services-

commissioning/locally-commissioned-services/

- 16.Association of Pharmacy Technicians UK. [(accessed on 9 August 2016)]; Available online: http://aptuk.org/about-us/pharmacytechnican/
- 17.Schafheutle E.I., Jee S.D., Willis S.C. Original Research: Fitness for purpose of pharmacy technician education and training: The case of Great Britain. Res. Soc. Adm. Pharm. 2017;13:88–97. doi: 10.1016/j.sapharm.2015.12.011. [PubMed] [CrossRef] [Google Scholar]
- 18.Ferendina I., Wiryanto W., Harahap U. Mapping of community pharmacy practices in Medan city Indonesia. Asian J. Pharm. Res. Dev. 2021;9:1–4. doi: 10.22270/ajprd.v9i1.887. [CrossRef] [Google Scholar]
- Setiadi A.P., Wibowo Y., Setiawan E., Presley B., Mulyono I., Wardhani A.S., Sunderland B. Evaluation of a community-based training to promote responsible self-medication in East Java, Indonesia. Int. J. Pharm. Pract. 2019;27:63–70. doi: 10.1111/ijpp.12461. [PubMed] [CrossRef] [Google Scholar]
- 20.Puspitasari H.P., Faturrohmah A., Hermansyah A. Do Indonesian community pharmacy workers respond to antibiotics requests appropriately? Trop. Med. Int. Health. 2011;16:840–846. doi: 10.1111/j.1365-3156.2011.02782.x. [PubMed] [CrossRef] [Google Scholar]