

Utilizing Pharmacy as a Bridge to Connect Health Care and Public Health

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Pharmacy and public health may not be thought of as natural partners, but the opportunity for collaboration is strong. Each system is available, accessible, and trusted by the public. By identifying shared health priorities, pharmacy and public health can come together to strengthen each other and improve health for all.

Introduction

Growing up in rural North Carolina, I was attracted to the profession of pharmacy by family stories, followed by experience in small-town independent pharmacies. When I spent some time interning at an independent pharmacy in Seagrove, North Carolina, I saw firsthand how impactful a caring pharmacy can be to a community. This experience solidified my desire to pursue pharmacy as a career and led me on the path to my first role focused on independent pharmacy. I started my career as a pharmacist by completing a Community Pharmacy Practice Residency through Moose Pharmacy in Concord, North Carolina and the University of North Carolina Eshelman School of Pharmacy. During this residency program, I obtained practice experience at an independent pharmacy, as well as research and teaching experience in the academic setting. The residency experience allowed me to obtain real-world practice experience and to see the “bigger picture” that comes with academia.

During the COVID-19 pandemic, my career focus shifted from pharmacy to public health. As I continued to learn more about how North Carolina’s local health departments operate, I was struck by the thematic similarities between independent pharmacies and public health organizations. National thought leaders have begun laying a foundation for how larger-scale pharmacy and public health partnerships could be formed, building upon the lessons learned from the COVID-19 pandemic.¹ Here at home, the health needs of North Carolinians are ever-changing. Our health care and public health systems must evolve to meet these needs. The pharmacy and public health systems in North Carolina are better positioned than one might think to come together and to meet these needs head on. In between my personal experience and the national movement to create partnerships between

pharmacy and public health entities, strong opportunities exist to advance both pharmacy and public health in North Carolina through meaningful collaboration.

Defining Public Health

Public health can, at times, face the challenge of meaning everything to everyone. Many health issues faced by Americans are framed as public health crises. While this is often true, the broad framing often makes it difficult to maintain perspective on what public health means in a tangible way. Broadly speaking, public health is often defined as “the science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organization, public and private communities, and individuals.”² This definition is a well-articulated conceptual framework for the broader idea of public health. For the purposes of this commentary, I will lean on the more specific idea of governmental public health. Often referred to as health departments, state and local governmental agencies provide key services best described in the Foundational Public Health Services framework.

Health departments provide public health protections in several areas, including preventing the spread of communicable disease, ensuring food, air, and water quality are safe, supporting maternal and child health, improving access to clinical care services, and preventing chronic disease and injury – these are also known as the Foundational Areas. Additionally, public health departments provide local protections and services unique to their community’s needs – these are known as Community-specific Services.³

Pharmacy and Public Health Are Everywhere

The potential for pharmacy and public health collections and collaboration begins in a rather clear space—the breadth of opportunity across North Carolina. North Carolina is a large state with diversity in both geography and population from the mountains to the coast. There are very few providers or organizations that can say they truly have statewide coverage. In fact, the 86 local health departments that serve all 100 counties are the only members of the health care safety net with a physical presence in every county. When this statewide spread is paired with over 1700 pharmacies North Carolina, the opportunity for collaboration and impact on health is as broad as any other coordinated effort that could be imagined.⁴

Pharmacy and Public Health Are Accessible

Perhaps more important than being physically present statewide, these two systems are accessible statewide. Literature suggests that individuals are likely to visit a pharmacy nearly twice as often as they are any other health care

professional, and patients with complex health needs may visit a pharmacy as many as 35 times per year.^{5,6} Health departments, on the other hand, provide as many as 100,000 patient visits per quarter across North Carolina. Most services provided by local health departments across these service counts are available to residents regardless of their insurance coverage or any other factor—a true indicator that the health department is a health care safety net for all (Department of Public Health (DPH) data brief presented to local health departments).

Pharmacy and Public Health Are Trusted

Availability and access are important, but can only go so far without an additional key element—trust. Pharmacists are commonly rated well in consumer trust, with the third highest rating of honesty and ethics across professions.⁷ This analysis is also noteworthy, as nurses are rated highest (among health professionals *or* across industries) for honesty and ethics. Nurses are foundational members of the governmental public health workforce.⁸

In the aftermath of the COVID-19 pandemic, there has been significant commentary regarding the loss of trust in public health. Data from North Carolina suggests the exact opposite. In polling conducted by the North Carolina Department of Health and Human Services (NCDHHS) Division of Public Health, two-thirds of North Carolinians rate NCDHHS and their local health department as doing either a good or excellent job, an improvement over the last 12 months. Additionally, 8 in 10 residents say the work of health departments is important to the health of North Carolinians, and trust in both NCDHHS and local health departments has grown from 2024 to 2025 (DPH presentation).

Identifying Shared Priorities

With availability, accessibility, and trust established as 3 shared foundational elements, we now look to resources that can help pharmacy and public health identify where partnerships could begin.

At a statewide level, 3 key documents come to mind where pharmacists and pharmacy organizations can work to better identify priorities for the public health system across the state and can begin to determine where pharmacy may bring value-added solutions to health needs and challenges. These documents are detailed in [Table 1](#).

These state-level documents are strong places to start identifying health priorities and opportunities. In North Carolina, local health-related needs will vary depending on the local community and population served. To truly dig into the best opportunity to address needs, and to best identify potential for local partnerships, the local health departments' community health assessment (CHA) and community health improvement plan (CHIP)

Table 1. Statewide Policy Documents of Interest

Document	Description	Primary Organization	Document Reference
North Carolina State Health Improvement Plan (SHIP)	Outlines priorities for addressing the full set of factors that impact a person's health and updates data on the progress of improvement.	NCDHHS ⁹	State health improvement plan is updated, addressing social drivers of health, Medicaid expansion and behavioral health for a healthier NC. News release. North Carolina Department of Health and Human Services. 2023.
Healthy North Carolina 2030	Establishes a set of indicators with 10-year targets designed to guide state efforts to improve health and wellbeing.	North Carolina Institute of Medicine, in partnership with NCDHHS ¹⁰	Healthy North Carolina 2030: A path toward health. North Carolina Institute of Medicine. 2020.
Future of Local Public Health in North Carolina	Outlines challenges faced by North Carolina's local public health system and outlines recommendations to improve the system.	North Carolina Institute of Medicine ¹¹	North Carolina Institute of Medicine. Foundations of health and opportunity: Investing in the future of local public health in North Carolina. North Carolina Institute of Medicine. 2022.

should also be considered. Local health departments are required to complete these assessments every 3–4 years. The assessments and improvement plans are valuable documents to identify local health needs and areas of priority. They provide strong starting points for pharmacies or pharmacy organizations that would like to better understand health priorities in a single county, health district, or region.¹²

The value-added opportunity from local health assessments can benefit both pharmacy and public health. Local pharmacies and their staff are very well attuned to the health care needs of their communities. Pharmacies and their staff can be valuable sources of data and perspectives for local health departments and can also be strong access points to gather perspectives from community members.

It is also important that public health professionals understand the current headwinds faced by community pharmacies and the potential health impacts should communities find themselves in pharmacy deserts. The economic challenges faced by community pharmacies in the United States are well documented. Communities are losing access to pharmacies nationwide, and pharmacy closures are occurring more rapidly in rural communities.¹³ Communities that find themselves in pharmacy deserts face numerous challenges to addressing health concerns. As partnerships and connections are considered, public health systems should consider opportunities where pharmacy services can improve health, diversify revenue streams, and demonstrate the value of partnerships between the two.

Table 2. Partnership Opportunities Depending on Scale

Scale	Pharmacy	Public Health
Local	Individual pharmacies, local chains	Local health departments ¹⁴
State	CPESN networks, ¹⁵ state pharmacy associations, ¹⁶ pharmacy chains ¹⁷	State health departments, state associations of city and county health officials, APHA state affiliate associations ¹⁴
Multi-state or national	CPESN USA Pharmacy Service Administrative Organizations, ¹⁸ pharmacy chains, NCPA Public Health Consortium ¹⁹	National Public Health Associations, federal health agencies

The scale and scope of partnership opportunities needs to be considered from both sides. Opportunity exists at the local, state, and national level, and leaders from each system should consider the opportunity at hand and which scale is most appropriate. Connection points to consider at each level of connection are listed in [Table 2](#).

Programmatic Areas of Impact

The list of potential opportunities for partnership is extensive. In this commentary, I will focus on 3 key areas that present perhaps the broadest and most readily available opportunities. These ideas are only where the potential begins. A wealth of other opportunities exist that are not listed here, and any of these items could warrant a full commentary scoping out the needs and opportunities in greater depth. The remainder of this commentary will touch on possible partnerships, with shared alignment between the foundational public health services and established or emerging services offered in community pharmacies.

Vaccines

Vaccination services are perhaps the clearest opportunity for broad partnership. Vaccination authority has grown for pharmacists and pharmacy technicians over the years, and the business model for the service is sustainable for pharmacies. Conversely, investment in public health vaccination services is declining in the post-pandemic era, including recent rescissions of federal funding for vaccinations. With vaccine hesitancy on the rise and funding for public health services in question, building strong relationships for vaccination services is a win-win-win for pharmacies, public health, and patients.

Awareness of services and referral partnerships is a simple and resource-light opportunity to begin building these relationships. Health department staff and leaders and pharmacies should work together to build awareness of services provided in communities, specifically around which vaccines are available in pharmacies and which patients are eligible. Deep dives into local data on vaccination rates, combined with shared awareness and perspective on areas of vaccine hesitancy and access challenges, can provide guidance on where local partnerships should start.

Reproductive Health Care

Recent legislative changes in North Carolina expanded authority for pharmacies to provide access to contraceptives. Public health systems in North Carolina are already promoting and encouraging expansion of these services and should continue to do so.²⁰ Similar to vaccine partnerships, public health should maintain an awareness of the current access points for pharmacy contraceptive service and consider referral or coordination partnerships. Awareness and support from public health entities can help these services grow and improve access to reproductive health care in North Carolina.

Emergency Preparedness and Response

No commentary on health in North Carolina would be complete in the current moment without an acknowledgement of the impact of Tropical Storm Helene. Western North Carolina came together in an amazing way to support its residents. Pharmacy and public health share in the fact that their roles in the response will never be adequately acknowledged.

Emergency preparedness and response is a foundational capability in public health.³ With extreme weather events being a primary focus in this space, pharmacies need to be considered as part of the emergency response infrastructure. Access and distribution of vaccines, medical countermeasures, medical supplies, and basic needs can be supported by engaging pharmacies in emergency planning.

Additional Collaborations

The list of opportunities could go on from here. Many additional partnerships merit exploration—opioid crisis response, 340B Drug Pricing Program contract arrangements, prevention and management of chronic diseases, and overall health education present additional points of connection for pharmacy and public health.

The focus here has been primarily on community pharmacy connections to public health, but other areas of pharmacy certainly present opportunities. Pharmacists in population health programs within hospital systems and outpatient clinics or in regulatory or industry roles all have potential for stronger connections to public health. These potential partnerships warrant further exploration.

Conclusion

Availability, access, and trust are core strengths of community pharmacy and public health. With both under threat due to business pressures for pharmacy and funding concerns for public health, both entities should

consider potential for partnerships. Deeper connections between the two can enhance sustainability for both, but most importantly can improve the health of the people that they serve.

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Disclosure of interests

The author has no conflicts of interest to declare.

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