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POLICY FORUM: INVITED COMMENTARIES & SIDEBARS

Medication Access Models for Older Adults and Underserved Populations: Replication and Delivery of Innovative Services Across the State

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Many barriers exist that impact older adults' abilities to access and manage medications. Senior PharmAssist is a nonprofit in Durham that provides medication management and access services to older adults. Here, we describe replication of Senior PharmAssist's model in Buncombe, Guilford, and Pitt Counties and highlight learnings from each county.

Background

Medication management and access is a significant challenge for older adults in North Carolina. Provision of medication management to community-dwelling older adults is limited by a shortage of geriatricians, providers' limited time with patients, and systemic obstacles that hinder pharmacists' ability to deliver expanded services in community pharmacies.[1,2] Medication Therapy Management (MTM) is an opportunity for pharmacists to support medication reconciliation and intervene on medication-related problems as an extension of care or in collaboration with providers in the community.

The nonprofit Senior PharmAssist was founded in Durham, North Carolina in 1994 to provide MTM services and improve medication access for older adults. Senior PharmAssist provides 4 core services to older adults with limited incomes: 1) MTM, 2) tailored referrals to community resources, 3) Medicare insurance counseling, and 4) medication copayment assistance. Copayment assistance is provided to a specific subset of older adults with incomes at or below 250% of the Federal Poverty Guidelines who are not eligible for Low-Income Subsidy (LIS), a federal program that helps with prescription costs for those below 150% of the Federal Poverty Guidelines.

Since its inception, Senior PharmAssist has demonstrated a significant impact on health care utilization and health perceptions of older adults in Durham. A study of 191 Senior PharmAssist participants from 2011 to 2017 determined that participants experienced a significant reduction in emergency department visits and hospitalizations compared to baseline after 2 years.

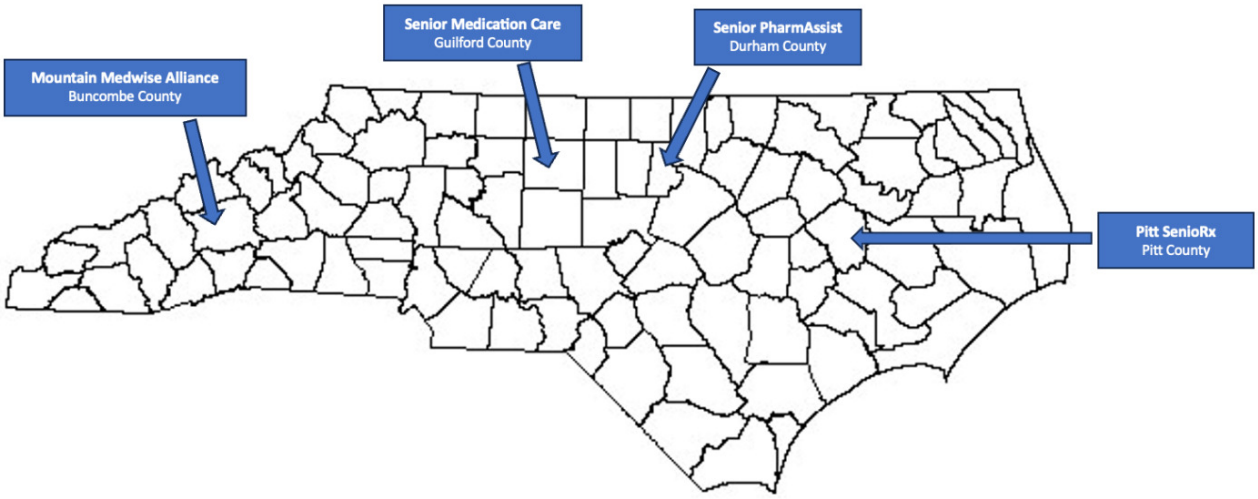

Figure 1. Programs with Replication of the Senior PharmAssist Model Services Across North Carolina

Source: North Carolina state and county boundary polygons.[5]

Participants also reported a significant improvement in their perceived health status.[3] The Senior PharmAssist model is unique in that it integrates medication management strategies within the community to support efforts already in place in physician offices and/or community pharmacies to ensure everyone is on the same "medication page."[4]

Given the success and positive impact on older adults' health outcomes in Durham, Senior PharmAssist conducted a statewide survey to set the stage for engaging communities interested in implementing the SPA model. Senior PharmAssist launched a learning collaborative, "Scalability of Senior PharmAssist to Promote Healthier Living for Older Adults," to replicate their innovative model in communities across North Carolina. The objectives of the learning collaborative were to improve community capacity for integrating health and social services for older adults with limited incomes, refine replication materials, and evaluate the scalability of the Senior PharmAssist model to other counties in North Carolina.

Methods

The Senior PharmAssist learning collaborative hosted the first virtual kickoff event in June 2022 with 3 counties in North Carolina, as shown in Figure 1: Buncombe, Guilford, and Pitt.[5] Demographics, implementation teams, scope of service provision, and initial outcomes of replication in each community, including Senior PharmAssist in Durham County, are described here, and characteristics of each county are listed in Table 1.

Table 1. Characteristics of Population by County (2022) and Medicare Data by County (2025)

–	North Carolina	Durham County	Buncombe County	Guilford County	Pitt County
Total Population (N)[6]	10,705,403	334,379	273,403	548,632	173,481
Age > 60 (n)[6]	2,543,891 (24%)	61,258 (18%)	78,367 (29%)	124,464 (23%)	34,424 (20%)
Age > 65 (n)[6]	1,876,555 (18%)	44,884 (13.4%)	60,018 (21.9%)	91,242 (16.6%)	25,192 (14.5%)
< 200% Federal Poverty Guidelines	20%	24%	27%	30%	31%
Living alone	27%	29%	26%	28%	29%
Less than high school education	13%	9%	7%	11%	16%
Disability[a]	34%	29%	30%	32%	41%
Median household income	$49,781	$57,648	$54,916	$49,721	$46,568
Medicare beneficiaries, aged and disabled (n)[7]	2,248,852	54,406	66,420	108,963	34,361
Part D Low-Income Subsidy or LIS, <150% of Federal Poverty Guidelines with limited resources and assets (n)[7]	66,661	1529	1368	3180	1253

[a] Definition of Disability: "A long-lasting physical, mental, or emotional condition that makes it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering".[6]

Durham County

While Senior PharmAssist began by focusing on medication access and appropriateness, it expanded to include tailored referrals to other agencies and Medicare counseling as the needs were identified. Thus, all 4 core services are provided by staff and volunteers in one agency, which ensures a level of prompt communication and information security. Senior PharmAssist employs 3 pharmacists who work closely with 3 community resource specialists, 1 program associate, and 1 development and communications director. The founding executive director is a pharmacist; however, she primarily focuses on administration and advocacy. The pharmacists conduct MTM, provide health education, and are Seniors' Health Insurance Information Program (SHIIP)-trained Medicare counselors. Since 2017, the pharmacists have had view-only access to the local health system's electronic health record (EHR). They securely message providers, which improves workflow and security. From July 2023 to June 2024, Senior PharmAssist served 2256 individuals in Durham; 408 individuals were provided a copayment card, 499 individuals aged 60 years or older had 822 MTM appointments, and 1463 individuals had 1564 Medicare appointments. Almost all participants received care navigation support.

Buncombe County

Buncombe County is home to one of the state's fastest-growing older adult populations; there are already more adults aged 65 and older than youth aged 0–17.[6] While portions of the county in and around Asheville are fairly well-resourced, other regions lack many basic community assets and health care services, and multiple areas of concentrated poverty exist. The Council on Aging of Buncombe County and primary care clinical pharmacists formed a

partnership called Mountain Medwise Alliance to adapt Senior PharmAssist services to Western North Carolina. The implementation team is led jointly by pharmacists and the Medicare program manager from the Council on Aging.

The current scope of services provided by the Mountain Medwise Alliance includes Medicare counseling, resource referrals, and Comprehensive Medication Management (CMM). Copayment assistance is not available in the current model. The Council on Aging serves as the SHIIP coordinating site and provides tailored resource referrals. Medication management is provided by clinical pharmacists in a primary care practice for those referred to the program. The Mountain Medwise Alliance program launched in October 2023. In 2023, 8 patients were referred and received at least 1 core service; 4 of the patients received 2 core services. In 2024, there were 18 referrals; 17 of those referrals received CMM, 12 received Medicare counseling, and 2 received referrals to community resources.

Guilford County

In High Point, Guilford County, a high concentration of older adults resides specifically in the "core city" where there are intersecting pharmacy and food deserts, directly impacting older adults' access to medications.[8] Five organizations in High Point formed a community collaborative called Senior Medication Care to help older adults access and manage medications through Senior PharmAssist service replication. Senior Medication Care service provision is led by a team of faculty pharmacists at High Point University's Fred Wilson School of Pharmacy, all of whom are SHIIP-trained Medicare counselors.

All 4 Senior PharmAssist core services are provided in Senior Medication Care: MTM, copayment assistance, tailored community referral, and Medicare counseling. Clinical pharmacists set up mobile offices in community spaces to provide services. The Senior Medication Care pilot launched in February 2024. Since launching, 10 older adults have scheduled intake appointments and received at least 1 core service. Four participants have received a copayment assistance card. Senior Medication Care pharmacists have completed a total of 36 unique encounters with these participants; 16 of these encounters have been for Medicare counseling.

Pitt County

Of the 4 sites, Pitt County has the smallest number of older adults, but many have significant disadvantages including low education, low income, and a high disability rate. Pitt County also has the lowest participation in Medicare LIS for financial support.[6,7] The county includes concentrated health care at a large academic medical center and a medical school, as well as additional care delivery sites across the county. Addressing poverty among older adults in Pitt County requires a specific focus on affordable housing, health care

access, and other essential services. Pitt SenioRx launched in September 2022 as a replication of Senior PharmAssist. The Pitt SenioRx team is led by Access East, a nonprofit care management entity, and includes pharmacists, SHIIP navigators, and aging specialists from ECU Health and The Pitt County Council on Aging. Pitt SenioRx provides clinical support services that include MTM, medication coverage analysis, and Medicare Part D plan comparison. Pharmacist-delivered MTM and SHIIP navigation services are provided based on referrals. Patients who receive services are also eligible to obtain a free pill box. During the 2024 Medicare Open Enrollment Period, clinical pharmacists provided clinical support to over 200 patients over the course of 19 days while onsite at the Pitt County Council on Aging and at 3 offsite clinics in rural senior centers. Pitt SenioRx was able to complete a total of 13 referrals for MTM encounters on 12 unique patients in 2024.

Key Learnings and Limitations

Replication of the Senior PharmAssist model and delivery of these innovative services in Buncombe County, Guilford County, and Pitt County has extended medication management services to older adults across North Carolina and has brought to light the unique needs of each community. Key learnings that have emerged thus far in the implementation process have been related to capturing participant information and programmatic data, challenges with interagency communication and referral processes, and the importance of collaboration and community engagement.

Secure documentation practices and effective programmatic data capture have been crucial for service implementation. At Senior PharmAssist, participant information is collected using a tailored, "homegrown" EHR using FileMaker Pro that acts as an interview guide for pharmacists and allows for the efficient use of data for clinical care and reporting. Additionally, pharmacists have access to a large, local health system EHR, which allows them to see other health services utilization, lab and test results, and other health care providers; access to the local health system EHR also makes it easier and more efficient to communicate with those providers.

Creation and use of EHR infrastructure for the other counties has been addressed in each community. For example, Senior Medication Care pharmacists in Guilford County do not have access to local health systems' EHRs. REDCap, an open source, HIPAA secure platform, has been used to build a unique EHR for capturing participant health information. Buncombe and Pitt Counties have used REDCap in a similar manner to share data infrastructure that is accessible for all entities involved. Though REDCap database creation is time consuming, its use has been successful for the implementation of Senior PharmAssist services.

Outside of EHR navigation, information sharing for referral purposes and interagency communication has proved to be a challenge when replicating Senior PharmAssist services. In Buncombe County, for example, the consent process for sharing protected health information (i.e., medication lists) between organizations has posed a logistical barrier and highlighted the importance of other referral avenues to ensure adequate access for older adults who may benefit from services. The implementation of services in other counties has underscored the need for individualized approaches when connecting participants to external resources and agencies. Structured approaches to interagency communication and referral processes are necessary and help ensure participants can access all needed services.

Another major key learning that has emerged during replication has been the importance of community engagement and collaboration for program sustainability. In Durham, for example, Senior PharmAssist engages volunteers, including local physicians and pharmacists, who serve on the formulary committee and advise the agency on coverage decisions. Continuous outreach to local providers and community groups helps the program reach new participants and partners in Durham. Collaboration is essential for successful service implementation, and all 3 counties have worked to navigate their unique community relationships. Differences in external agency operating models, information systems, and varied community priorities and access have impacted implementation speed and infrastructure development in each county. It is clear from ongoing implementation that consistency in engagement and intentional community ownership influence service reach, referral potential, and program impact in each community.

Resources to support service implementation also challenge Senior PharmAssist replication. All 3 adopting community programs are co-led by faculty geriatric pharmacists at schools of pharmacy with varying levels of dedicated time for these initiatives. Each community has developed a service implementation plan based on available pharmacist time. Replicating the Senior PharmAssist model in communities without academic pharmacists may prove challenging without dedicated funding to contract with local pharmacists. Challenges in securing funding for copayment assistance and navigating billing opportunities for pharmacist-delivered services have also been significant limitations for the implementation and sustainability of all services.

Conclusion

The Senior PharmAssist model provides 4 core services: MTM, tailored referrals to community resources, Medicare insurance counseling, and medication copayment assistance. This model addresses the unique medication management needs of older adults—an important public health need across North Carolina. The Buncombe County, Guilford County, and Pitt County programs continue to refine Senior PharmAssist service

replication to meet the needs of their individual communities. Senior PharmAssist plans to continue working with the inaugural adopting communities and add 3 more in the next 2 years. This effort will include funding opportunities to support a local project coordinator and small grants to support milestone-driven metrics, such as raising local matching funds, ensuring HIPAA-secure communications, and, based upon the number of services provided, the number of older adults reached with the model.

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Pitt County. Access East staff, Pitt County Council on Aging staff and volunteers, ECU Health, ECU Brody School of Medicine, Louise Oriole Burevitch Fund, and Campbell University College of Pharmacy and Health Sciences students.

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