Expansion of clinical pharmacist positions through sustainable funding

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Purpose. Expansion of clinical pharmacist positions through sustainable funding is described.

Summary. The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences was awarded a 2-year program grant to establish an integrated clinical pharmacy program for underserved residents in family health centers in northeastern Colorado. The grant enabled the hiring of 2 bilingual, full-time, board-certified, postgraduate year 2–trained clinical pharmacists to initiate comprehensive clinical pharmacy services. Clinical pharmacy services for diabetes, hypertension, and dyslipidemia management were provided during direct patient care visits using collaborative drug therapy management protocols to facilitate comprehensive medication management. Initial visits lasted 1 hour, and follow-up visits lasted 30 minutes. In addition, clinical pharmacists provided point-of-care consultations for patients seeing other healthcare providers. All patient encounters and consultations were documented in the electronic health record. Success of the clinical pharmacy program was evaluated based on the achievement of goal blood pressure values, glycosylated hemoglobin values, and low-density-lipoprotein cholesterol levels. Pharmacists' involvement in patient care activities led to improvements in all of these clinical outcomes. This coincided with unique funding opportunities with regional accountable care organizations that sought to demonstrate improved patient care in an expansion population. As a result, 2 grant-funded clinical pharmacist positions in 2 community health clinics were converted into 4 faculty positions in 5 community health centers funded by regional accountable care organizations.

Conclusion. Collaboration with accountable care organizations resulted in the successful funding of ambulatory care clinical pharmacy services. These services resulted in improved chronic disease control and provider satisfaction.

Keywords: community health center, ambulatory care; funding; pharmacy

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Numerous studies have demonstrated improved patient outcomes when pharmacists are members of the patient care team.[1-3] Chronic disease metrics, such as glycosylated hemoglobin, low-density-lipoprotein cholesterol, and blood pressure values, improve as a result of pharmacist-provided patient care services.[1-8] In addition to improving health outcomes when collaborating with physicians, clinical pharmacists can generate an average return on investment of between 3:1 and 5:1.[9] Despite these clear benefits, funding clinical pharmacist positions is a challenge.[10] Most reimbursement models require fee-for-service billing that does not adequately cover the cost of employing clinical pharmacists.

Billing opportunities are even more limited in federally qualified health centers (FQHCs), where the Centers for Medicare and Medicaid Services

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does not yet recognize pharmacists as healthcare providers. FQHCs are safety-net services and clinics that were created under Medicare in 1991. The primary purpose of FQHCs is to provide primary care services to medically underserved urban and rural communities.[7] Typically, FQHCs provide a variety of disease management services that focus on chronic conditions using interdisciplinary groups of providers. However, clinical pharmacists have not traditionally been included on these teams despite the fact that medications are a cornerstone of chronic disease management.

Various strategies may be used to fund clinical pharmacists in FQHCs and overcome these reimbursement barriers. Historically, funding for clinical pharmacists was provided by schools of pharmacy to offer students practice opportunities within experiential training programs.[11] These practice opportunities often require clinical pharmacy faculty members to divide their time between clinical and teaching activities, which may not always allow for the development of robust and consistent clinical services. Grants are another common method used to fund clinical pharmacists. This strategy can facilitate the development of services but is often time limited and is not a sustainable source of funding. Ultimately, the goal is for clinical pharmacy services in FQHCs to become self-sustaining.

This article describes the implementation of a clinical pharmacy service model and the transition from grant-based funding to sustainable funding within an FQHC setting.

Background

The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) was awarded a 2-year program grant by the Colorado Health Foundation in 2012 to establish an integrated clinical pharmacy program for underserved Coloradoans in the Salud Family Health Centers (Salud) system. Salud operates 12 clinics and a mobile unit in northeastern Colorado, primarily providing care to low-income minority populations and migrant and seasonal workers. About 71% of its patients are Hispanic or Latino, and more than half of patients seen at Salud receive healthcare benefits through Colorado Medicaid.

KEY POINTS

- Changes in healthcare reimbursement that focus on value-based outcomes offer significant opportunities for pharmacists to participate in chronic medication management activities and team-based care.
- Medicaid expansion has resulted in changes in patient demographics and increased opportunities for healthcare teams to collaborate with accountable care organizations.
- Clinical pharmacists can play a significant role in improving clinical outcomes in ambulatory care, especially within the federally qualified health center environment.

Before implementing this integrated clinical pharmacy program, SSPPS provided a student-run anticoagulation service at Salud for several years. Although this student-run service was successful, there was a desire to expand the scope of clinical pharmacy services beyond anticoagulation. The Colorado Health Foundation program grant enabled SSPPS to hire 2 bilingual, full-time, board-certified, postgraduate year 2 (PGY2)-trained clinical pharmacists to initiate comprehensive clinical pharmacy services. Services included hypertension, diabetes, and dyslipidemia management within 2 Salud clinics, located in Brighton and Commerce City, Colorado. The 2 clinical pharmacists spent at least 80% of their time providing direct patient care while training students and PGY2 ambulatory care residents and doctor of pharmacy students. These 2 clinic locations were selected based on patient volume and relatively close proximity to the SSPPS campus.

Clinical pharmacy services for diabetes, hypertension, and dyslipidemia management were provided during direct patient care visits using collaborative drug therapy management (CDTM) protocols to facilitate comprehensive medication management.[9] Initial visits lasted 1 hour, and follow-up visits lasted 30 minutes. In addition, clinical pharmacists provided point-of-care consultations, referred to as "curbside consults," for patients seeing other healthcare providers. All patient encounters and curbside consults were documented in the electronic health record. These clinical pharmacists also provided clinical education (e.g., guideline updates, clinical pearls) and drug information to support providers and other patient care initiatives in each Salud clinic. Clinical pharmacists also supervised pharmacy students who participated in home visits for the Salud AmeriCorps Community Health Corps Transitions-of-Care program, where pharmacy students visited patients recently discharged from the hospital. Pharmacy students traveled with the AmeriCorps volunteers, performed medication reconciliation and medication education, and consulted with their supervising faculty member by phone on any issues arising during the home visit.

Success of the clinical pharmacy program was evaluated based on clinical outcomes identified through the Uniform Data System metrics and the Healthy People 2020 Initiative.[12] These measures included achievement of goal blood pressure values, glycosylated hemoglobin values, and low-density-lipoprotein cholesterol levels. Pharmacists' involvement in patient care activities led to improvements in all of these clinical outcomes. These metrics were chosen because

they align with the quality measures FQHCs are required to report to the Health Resources and Services Administration (HRSA) as part of ongoing funding support of FQHCs by HRSA. Perception regarding value of clinical pharmacy services and provider satisfaction with clinical pharmacy recommendations was also evaluated by surveying medical providers at the Salud clinics. Over the 2-year period, pharmacists documented 7,163 interventions in 3,299 patients. This project was approved by the Colorado Multiple Institutional Review Board.

Pursuing sustainability

Funding the program beyond the grant period was a priority for Salud administration and SSPPS. Salud was supportive of clinical pharmacy services; however, it faced multiple budgetary challenges and the threat of decreases in federal funding. SSPPS was also supportive of the program but wanted to secure external funding sources.

Colorado is a Medicaid expansion state. After the passage of the Affordable Care Act, there was a significant increase in the number of beneficiaries receiving care at Salud. Colorado created regional care collaborative organizations (RCCOs) to function as regional accountable care organizations in 7 different regions across the state. RCCOs were empowered to identify resources and given flexibility to provide optimum healthcare for beneficiaries in their respective communities. Medicaid expansion also shifted the demographics of beneficiaries, resulting in the care of an increased number of low-income adults with chronic diseases.

Colorado Access, a nonprofit Colorado health plan, was the RCCO for 3 Colorado regions, including the region where the 2 Salud clinics were located. Colorado Access was interested in funding innovative, interprofessional clinical service models that improved chronic disease outcomes. Because Salud clinics provided care to a large percentage of Colorado Access patients, Colorado Access agreed to fund 2 full-time clinical pharmacy faculty members and 1 PGY2 ambulatory care resident for 2 of Salud's largest clinics, the 2 that were included in the initial program grant located in Commerce City and Brighton.

Another RCCO organization, Rocky Mountain Health Plans, provided healthcare coverage in an adjacent region where 2 additional Salud clinics are located. This RCCO also agreed to fund 2 clinical pharmacy faculty members to initiate similar clinical pharmacy services in Fort Collins, Colorado, after the value of clinical pharmacy services in managing chronic diseases was demonstrated.

Ongoing data collection

Because RCCOs are accountable to Colorado Medicaid for funding, both Colorado Access and Rocky Mountain Health Plans require the clinical pharmacy program to provide quarterly metric reports. The clinical pharmacists are responsible not only for improving clinical outcomes but also educating Salud providers, ensuring provider and patient satisfaction with the program, and implementing innovative adherence-related and behavioral health–related projects. The average number of patient visits has continued to increase each quarter. Patients referred for clinical pharmacist intervention tend to exhibit a higher level of disease severity.

Discussion

We were successful in collaborating with accountable care organizations, such as the Colorado RCCOs, to fund ambulatory care clinical pharmacy services. Both the value and impact of clinical pharmacy services within the Salud clinics were proven using clinical metrics that demonstrated improvements in chronic disease control and provider satisfaction. Direct patient care activities provided by clinical pharmacists also allowed the FQHC to expand patient care volume. By having clinical pharmacists provide disease management, medical providers were more available to focus on new patients and acute care situations. It was purposeful to have this integrated clinical pharmacy service provide comprehensive medication management using CDTM protocols.[13] Moreover, the 2 clinical pharmacists who managed this program met the competencies for clinical pharmacists as defined in the 2017 American College of Clinical Pharmacy guidelines.[14] Both of these key components, which ensured a high level of direct patient care, allowed for the success of this program.

It was imperative that our clinical pharmacy programs be strategically aligned with the reporting metrics of the RCCO funder. Metrics related to improvement in chronic disease management, integrated care, transitions-of-care programs, and reductions in emergency department visits have all been targets of our clinical pharmacy program. Similarly, initiatives in which clinical pharmacists may typically be involved in other ambulatory care settings that do not directly align with RCCO goals were less of a focus in order to meet funder and state priorities. One example of these types of initiatives was anticoagulation management. While clinical pharmacists continue to be available for consultation for difficult cases, they no longer directly manage all anticoagulation patients. This purposeful change freed up clinical pharmacist time to pursue the goals of the funding organization by allowing resources to align more directly with the needs of the RCCO.

Clinical pharmacists can play a significant role in improving clinical outcomes in ambulatory care, especially within the FQHC environment. Bundled payments that encourage improvements in quality of care and patient outcomes are in line with the transition toward value-based reimbursement, which can be achieved with expanded team-based care.

In 2018, Colorado anticipates that a single accountable care party will manage both physical and behavioral health services. In anticipation of

these opportunities, the clinical pharmacy team has developed additional CDTM protocols for anxiety, depression, and bipolar disorder. In addition, 1 of our new faculty members is board certified in psychiatric pharmacy and provides monthly team-based education to all of Salud's behavioral health providers. Our Salud clinical pharmacists are transitioning toward a population health approach for patient care for several chronic diseases governed by CDTM protocols to use their time to provide care to a large number of patients and improve overall healthcare quality.

Conclusion

Collaboration with accountable care organizations resulted in the successful funding of ambulatory care clinical pharmacy services. These services resulted in improved chronic disease control and provider satisfaction.

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Additional information

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