

Pharmacist-Physician Split-Shared Visits in a Federally Qualified Health Center: Lessons Learned from a Novel Reimbursement Model using Telehealth

Nada M. Abou-Karam, PharmD, APh, BCACP¹; Melissa E. Jump, PharmD, BCACP²; Jingying Jiao, BA, PharmD Candidate³; Andrew N. Schmelz, PharmD, BCACP⁴

¹Department of Pharmacy Practice and Administration, Western University of Health Sciences College of Pharmacy, Pomona, CA

²Department of Clinical Pharmacy, AltaMed Medical Group, Commerce, CA

³West Coast University School of Pharmacy, Los Angeles, CA

⁴Butler University College of Pharmacy and Health Sciences, Indianapolis, IN

Abstract

Introduction: The Federally Qualified Health Center (FQHC) setting poses unique challenges to reimbursement of services provided by ambulatory care pharmacists; however, recent changes to telemedicine reimbursement have created new opportunities to help overcome these challenges. This article describes the experience and outcomes of the implementation of a novel, pharmacist-physician split-shared telehealth model at AltaMed Medical Group, a large, multi-site FQHC in Los Angeles and Orange counties.

Program Development and Implementation: A pilot program for pharmacist-physician split shared tele-visits was launched at one clinic site with one clinical pharmacist and has since been expanded to a total of 6 sites and 5 clinical pharmacists. Prior to this program, clinical pharmacists saw patients for diabetes mellitus (DM) video-conference disease management appointments. With the launch of the pilot program, additional steps were added to pre-existing workflows to create a model in which visits with the clinical pharmacists were followed by an “enhanced visit” with an eligible, billable clinic provider.

Outcomes: Average A1c change for all patients in the split-shared model was -1.5%, and average A1c change for program graduates from enrollment through graduation was -3.8%. Evidence from similar services have also been associated with significant increases in revenue from a split-shared model, indicating this design can be a viable option for financial justification of ambulatory care pharmacy services.

Conclusion: In the setting of current limitations, we advocate for increased utilization of shared visits and split-shared visits as a viable method to generate revenue and aid in the justification of clinical pharmacy services.

Keywords: shared visits, split visits, split-shared visits, pharmacist-physician collaboration, reimbursement models, telehealth

Introduction

In the United States, most states and the District of Columbia recognize pharmacists as health care providers.¹ There is an abundance of data demonstrating the positive contributions of pharmacist-provided medication management services, including greater achievement of clinical goals, reduction of avoidable readmissions, and improved patient satisfaction.²⁻⁹ Despite this evidence, pharmacists remain unrecognized as health care providers under federal law, and do not qualify for direct payment for patient care services. Although both the US Surgeon General and American College of Physicians support the notion of adding pharmacists to integrated care models,¹⁰ generating revenue for clinical pharmacist services remains a challenge in most practice settings. Within Federally Qualified Health Centers (FQHCs), where the reimbursement model for providers differs from other traditional practice models, reimbursement opportunities are especially limited. While “incident-to” billing, wherein physicians and other providers

are able to bill separately for services provided by other individuals outside of an initial encounter, is allowed in the FQHC setting, it is not considered reimbursable. In an FQHC, qualified providers are paid a comprehensive encounter payment specific to each FQHC under the Prospective Payment System (PPS) from the Centers for Medicare & Medicaid Services (CMS). PPS is meant to cover all additional medical services, supplies, and care coordination needed for the patient. Unlike physicians, nurse practitioners (NPs), physician assistants, nurse midwives, certified nurse anesthetists, clinical psychologists, licensed clinical social workers (LCSWs), and registered dietitians, pharmacists are not considered qualified providers.¹¹

Revenue from 340B drug discount programs and collaboration with colleges of pharmacy have historically been used to expand clinical pharmacy services in the FQHC setting. However, there remains a need for payment methods tied more directly to patient care activities. In a 2019 qualitative thematic analysis of interviews with pharmacists and FQHC leadership in ten FQHCs, “sites identified that improvement in compensation opportunities for pharmacists as providers of care is needed and may be necessary for continued expansion of pharmacy services in FQHCs...reimbursement challenges continue to limit expansion of the model.”¹²

Corresponding author:

Nada M. Abou-Karam, PharmD, APh, BCACP
Department of Pharmacy Practice and Administration
Western University of Health Sciences College of Pharmacy
Pomona, CA; Email: nm.aboukaram@gmail.com

One method for revenue generation is utilization of a co-visit, or shared visit model, in which both a pharmacist and a billable provider provide patient care within a single appointment. Another variation of this model is the split-shared visit model, in which both pharmacist and billable provider are involved in the patient encounter; however, the encounter may be split into multiple visits (occurring within the same day or week) during which pharmacist and billable provider provide separate, but collaborative services. In both of these models, only the billable provider is reimbursed directly for services, however the workload of the billing provider is reduced as a result of the collaboration, productivity increased, and as demonstrated in several studies, patient outcomes and satisfaction are also often improved. Despite the potential benefits of shared visit and split-shared visit models, a review of the literature only found four publications discussing the outcomes of such practice models in the FQHC or Rural Health Center (RHC) setting, which summarized outcomes from seven different health centers.¹³⁻¹⁶ There are currently 1385 registered FQHCs¹⁷ and 4799 RHCs¹⁸ in the United States.

Further review of the literature and discussion with colleagues through a national email listserv for FQHC pharmacists further confirmed that shared visits and split-shared visits appear to be significantly underutilized by pharmacists in the FQHC setting. Furthermore, the utilization of telehealth, which has become increasingly critical in the context of the COVID-19 pandemic, also appears to be vastly underutilized for the purpose of helping to facilitate shared visits or split-shared visits in FQHCs. Of the four identified publications discussing shared visits in FQHCs, none mentioned the utilization of telehealth.¹³⁻¹⁶ In this article, we aim to describe our experience and outcomes with the implementation of a novel, pharmacist-physician split-shared telehealth model at AltaMed Medical Group, a large, multi-site FQHC in Los Angeles and Orange counties.

Program Impetus and Development

In March 2020, CMS broadened access to telehealth services under the 1135 waiver authority and Coronavirus Preparedness and Response Supplemental Appropriations Act.¹⁹ Under this new waiver, Medicare expanded payment for telehealth services beyond designated medical facilities and persons living in designated rural areas. A range of providers and qualified non-physician healthcare professionals were newly eligible for expanded billing for telehealth or E-visits including physicians, NPs, clinical psychologists, LCSWs, physical therapists, occupational therapists, and speech language pathologists. Although multiple studies demonstrate promising improvements in clinical and medication adherence outcomes via pharmacist-delivered telehealth services,²⁰ keeping with precedent, pharmacists were not included as qualified providers eligible to bill for any of the expanded Medicare telemedicine services.

In an effort to participate in telehealth expansion and contribute to improved patient outcomes during the COVID-19

pandemic despite exclusion from the 1135 waiver, the clinical pharmacy department within AltaMed Medical Group explored shared visit and split-shared visit billing models, in collaboration with billable providers in family medicine and internal medicine. In July 2020, a pilot program for pharmacist-physician split shared tele-visits was launched at one clinic site with one clinical pharmacist, and has since been expanded to a total of 6 sites and 5 clinical pharmacists. In addition to clinical pharmacists, representatives from patient financial services, compliance, operational excellence, and patient access teams participated in the planning of the pilot. Site medical directors, "physician champions," clinic administrators, nurse supervisors, and pharmacy technicians serving as care coordinators were also involved in workflow development and implementation.

Program Implementation and Patient Population

AltaMed is the nation's largest independent FQHC, with more than 50 sites across Los Angeles and Orange Counties, providing services to more than 300 000 members annually in the areas of primary care, women's health, dentistry, senior care, HIV, and behavioral health. Within the primary care arm, clinical pharmacists provide a variety of clinical services under collaborative practice agreements (CPAs) with family medicine and internal medicine providers utilizing in-person visits, telephonic patient care, and/or video visits.

The AltaMed Clinical Pharmacy Diabetes Management Program (DMP) was selected as the clinical service for which to pilot the split-shared visit model. One clinic in Orange County was selected as the pilot site. The clinical pharmacist piloting the service was previously conducting diabetes management visits under physician-pharmacist CPAs at this and other sites via video conferencing. Upon receiving referrals from providers for diabetes management, visits were conducted independent of the referring provider's schedule and not linked to or coordinated with any other visits by billable providers at the clinic sites. Hence, prior to the launch of the pilot, no direct revenue generation was tied to the provision of these visits.

An explanation of the DMP is warranted prior to the description of its off-shoot; the split-shared visit pilot program. Clinical pharmacists in the DMP program perform a multitude of interventions. They perform medication reconciliation, interview patients regarding diabetes history, order and interpret laboratory orders including A1c and albuminuria screening, and develop and document patient-specific care goals. They identify and resolve drug-related problems through non-pharmacologic methods, and through the initiation and modification of oral and injectable medications. The diabetes CPA at AltaMed also includes the management of diabetes comorbidities, and clinical pharmacists function under additional protocols including those for hypertension, hyperlipidemia and antithrombotic management. While clinical pharmacy services at AltaMed are divided into various programs focusing on disease states or drug classes (ex: diabetes, hypertension, hyperlipidemia, antithrombotic

management, HIV, opioid abuse, etc.), management of the target disease state is complemented by management of other comorbidities. While conducting calls within the context of the DMP, pharmacists address hypertension, hyperlipidemia, and other conditions when warranted by the patient's condition. Therefore, these clinical services function within the framework of Comprehensive Medication Management.

With the launch of the pilot program, additional steps were added to pre-existing DMP workflows to create a model in which DMP visits with the clinical pharmacist were followed by an "enhanced visit" with an eligible, billable clinic provider, scheduled by a pharmacy department care coordinator. Prior to this follow-up visit, the billable provider reviews the note in the electronic medical record (EMR) outlining the diabetes care plan designed and initiated by the pharmacist, then initiates telephonic outreach to the patient to re-emphasize the key components of the care plan, and answer any additional questions as needed. While the average DMP visit is scheduled for 30-60 minutes, the follow-up provider visits are scheduled for 10 minutes. After both coordinated components, clinical pharmacist and physician encounter, are completed, the billable provider bills for his/her encounter. DMP visits in the split-shared visit model are delivered through videoconferencing or via telephone, and the follow-up provider visit is currently delivered via telephone.

A new template for scheduling patients for the split-shared visits was created in the EMR, and training sessions were held for care coordinators, provider champions, and provider partners performing follow-up calls at each participating site prior to program launch.

The patient population targeted by the split-shared visit model are adult patients with Type II Diabetes Mellitus (DM) and A1c >8%, who have previously established care with an AltaMed primary care provider. Pediatric patients, those with Type I DM, Gestational Diabetes, and those managed by endocrinology or the AltaMed PACE (Program for the All-Inclusive Care of the Elderly) Program are not eligible for participation.

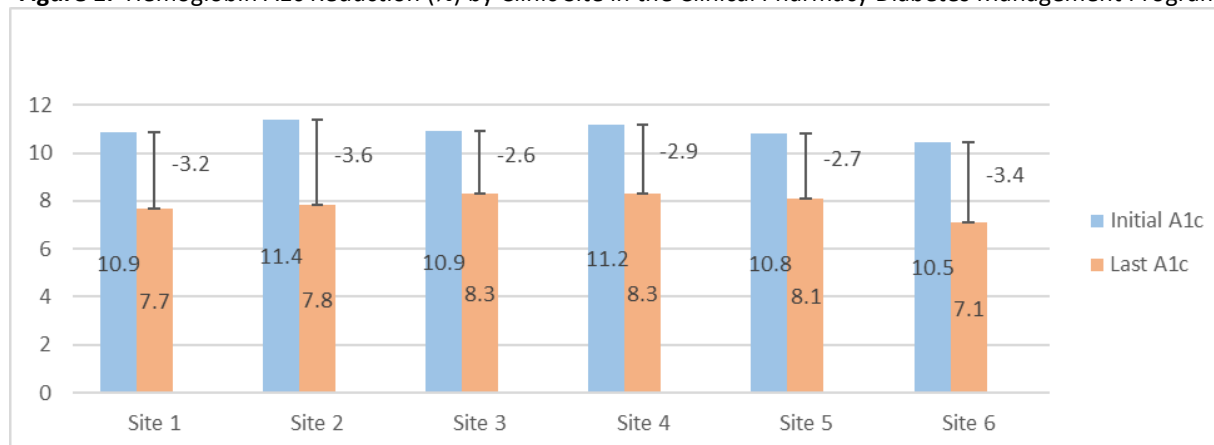
Clinical Outcomes

While the split-shared visit model has been expanded greatly since program launch, it is still limited to a subset of the total AltaMed DM population. Expansion to and training of all primary care clinic sites may take time given the complexity and size of our organization, as well as competing priorities stemming from the Covid-19 pandemic. From June 2020 to March 2022, 548 patients had at least one visit with clinical pharmacy for DM management. Approximately 36% (195/548) of these patients had at least one visit in the split-shared visit model. Average baseline A1c for all patients participating in split-shared visits was 11.0%. Average of last measured A1c for this same population, evaluated by chart review in March 2022, was 9.5%, demonstrating a decrease of approximately 1.5%.

During this same time frame, 51 patients graduated from the DMP program. Graduation is defined as achievement of A1c < 8% with the absence of hypoglycemia episodes. Average baseline A1c for graduates was 11.0%. Upon graduation, average A1c was 7.2%, showing a substantial decrease of 3.8%. While sufficient data is not yet available to make direct comparisons, this A1c decrease may be greater than average A1c reductions from historical data from the greater DMP program, re-evaluated as of August 2021 (Figure 1).

Current limitations of our A1c data sets include a lack of clarity on true graduation rates and time to achievement of goal A1c. Patients are enrolled in diabetes management on a rolling basis, and we do not yet have sufficient data on no-show rates and percentage of patients lost-to-follow-up. Based on the subjective provider experience at our and many other FQHCs, it is a common occurrence for patients to fail to show up to appointments, and providers are frequently unable to reach patients for rescheduling after multiple attempts. Additional A1c data has also been difficult to capture given competing priorities of our clinical analytics team during the Covid-19 pandemic, as well as patient concerns about laboratory visits during this time.

Figure 1. Hemoglobin A1c Reduction (%) by Clinic Site in the Clinical Pharmacy Diabetes Management Program



Provider Experience

In addition to encouraging reimbursement and clinical outcomes data, feedback from physician providers and clinical pharmacists at each participating site about their experience with split-shared visits has been positive, and further expansion of the program to additional sites is planned. To understand provider experience, participating billable providers were surveyed via email, and asked to describe in freeform the impact of the split-shared tele-visit model on their practice and patients. Of the 13 participating providers, 4 provided formal feedback via email. Recurrent themes in feedback provided by physicians included: high satisfaction with the extent of A1c reduction, increase in patients' engagement in self-care and increased patient understanding of DM, satisfaction with the ease of follow-up call workflows, and short duration of physician follow-up calls after the initial pharmacist visit.

Other Successful Models Utilizing Split-Shared Visits

While split-shared visit models appear to be underutilized, evidence described in earlier literature provides examples of workflows and clinical and financial impacts. Gonzalvo et al¹³ and Ulrich et al¹⁴ provide financial outcomes indicating that pharmacists practicing in this model on an approximately full-time basis might expect to generate over \$150 000 of revenue above what a physician provider would typically generate. Roll et al¹⁵ and Peterson et al¹⁶ both provide evidence of improved clinical markers such as A1c (change of -0.5% and -1.75% in 3-6 months, respectively), as well as systolic and diastolic blood pressure. The workflows in these studies also varied in terms of patient scheduling. Two studies used a process whereby patients were scheduled for both components of the split-shared visits in advance, as is also the current AltaMed workflow. In the other two studies, patients were identified for split-shared visits on the day of a previously scheduled provider appointment. Regardless of scheduling, authors of all four studies discussed a preference for the pharmacist to see the patient before the physician provider when possible, though at times this was not feasible. Unlike our program at AltaMed, none of the previous models incorporated telehealth into their workflow to support split-shared visits, making ours a novel variation of this model that we hope can provide an example for others to learn from.

Lessons Learned

Involve Physician Champions Early On

The split-shared visit program at AltaMed has generated interest in continued program expansion. The program has thus far been deemed successful, as billable visits at multiple clinic sites have increased simply by workflow changes that have linked pharmacist and physician visits into a coordinated clinical model. One major lesson learned during the initial planning stages was the importance of including "physician champions" early on in the process. At the start of the program, several meetings were held with members of non-clinical departments in order to explain the rationale for split-shared visits and potential benefits from a reimbursement, clinical, and provider-

satisfaction standpoint. After the initial meetings, it became clear that a knowledge-gap and hesitancy still existed in regards to clinical pharmacy services, in particular by those who were not clinicians and those that had never worked collaboratively with clinical pharmacists in the past. Despite multiple attempts to explain what a clinical pharmacist does in the area of DM management, this knowledge gap and discomfort were not fully overcome until one of the site medical directors familiar with pharmacist services joined the planning team. This provider, whose patients had been benefitting from the DMP for several years, provided concrete examples of successful pharmacist-managed insulin titration, and expressed strong support for clinical pharmacy services generally. Progression from planning stages to program implementation occurred at a much faster rate after the medical director's addition to stakeholder meetings.

The Value of Precedent

In addition to reimbursement potential, another identified reason for the fast expansion of the program from 1 site to 6 sites within approximately one year is the demonstration of positive clinical outcomes. Data on A1c reduction within the DMP patient population was available prior to the launch of the first split-shared visit pilot. As the initial program had proven clinical benefits, this provided further support that it was worthwhile to add to the complexity of current DMP workflows, and involve a physician-follow-up component to allow for reimbursement. As demonstrated in Figure 1, positive A1c data continued to be tracked and presented for each clinical site during the process of program expansion.

Prepare the Patient for Changes Ahead

Similar to provider feedback, patient feedback on the split-shared visit model has been largely very positive. Patients have verbally expressed satisfaction at reaching their care goals, and are largely pleased with the amount of time the clinical pharmacists are able to spend with them focusing solely on DM care. Additionally, patients have expressed appreciation for the additional opportunity to touch base telephonically with the physician provider for additional questions, sometimes regarding new or non-DM related problems that have come up since their last office visit.

One anticipated area of discontent on the part of patients prior to program launch was simply the increase in the number of phone calls to patients needed in order to schedule and then carry out the additional follow-up component of the DM encounter. One method employed to mitigate the frustration with increased total calls was for the clinical pharmacy care coordinators to explain these changes and prepare patients for the new workflows, and associated rationale, prior to official program launch. While, as stated above, many patients were accepting of the calls and pleased with the additional opportunity to touch base with a physician provider, others did express impatience with what they viewed as too many phone

calls. Thus far, however, no patients have requested removal from the program due to the increase in calls.

Additional Opportunities for Split-Shared Visits

Apart from disease management and comprehensive medication review, ambulatory care pharmacists can also facilitate Medicare Annual Wellness Visit (AWV) completion.¹⁴ Outside of the FQHC setting, AWVs can be completed as stand-alone services which pharmacists can provide as medical professionals working under a physician's direct supervision. However, under the PPS, AWVs are billed as a part of an FQHC visit,¹⁷ which pharmacists cannot conduct independently as they are not recognized as FQHC providers. Use of a split-shared model would provide a mechanism for pharmacists working in FQHCs to provide AWVs in a way that would be reimbursable by CMS. Similarly, the provision of Transitional Care Management (TCM) Services are an excellent opportunity for implementation of a split-shared visit model. TCM codes can be utilized within the FQHC setting when 3 criteria are met: (1) Post-discharge outreach attempt within 2 business days (2) "Certain non-face-to-face Services" which may include review of discharge information, education, referrals, or follow-up appointment scheduling (3) Face-to-Face or Telecommunication Visit within 14 days with qualifying provider.²¹ While again, clinical pharmacists are not able to bill directly for this service as qualifying providers, they can contribute to critical post-discharge activities such as medication reconciliation and medication education, either telephonically or in-person, and serve as members of the clinical staff that help that help fulfill TCM components (1) and/or (2) above.

Post-discharge medication reconciliation is critical to improvements in TCM services, as it has been reported that greater than 50% of documented medication errors occur at admission, transfer, or discharge,²² and adverse drug reactions may be the cause of 35% of hospital readmissions.²³ Several studies have demonstrated a positive impact on readmission reduction through pharmacist-provided Transitions of Care clinical services, including one analysis of Project RED in which it was found that a follow-up call by a clinical pharmacist 2-4 days post-discharge led to statistically-significant readmission rates (0.227 vs 0.519, $P < .001$).⁷

One example of an FQHC-based Transitions of Care Clinical Pharmacy program currently utilizing a split-shared visit model was identified through a national email listserv for FQHC pharmacists. Christ Community Health Services in August, GA currently employs a model in which the clinical pharmacist evaluates post-discharge patients in clinic after discharge from a local hospital, in order to conduct medication reconciliation, address barriers to medication compliance, and identify and mitigate therapeutic medication-related problems. After the pharmacist visit, the encounter is then transferred in the EMR to the schedule of a qualifying, billable provider, who completes the face-to-face component of the TCM services.

Chronic case management (CCM) is another popular payment mechanism to provide financial support for clinical pharmacy services. CCM pays for care coordination provided by an FQHC practitioner or clinical staff and includes time spent coordinating care irrespective of the patient being present while these activities occur. Numerous criteria must be met for practices to bill for CCM services, though the services many clinical pharmacists perform count towards the monthly time requirement (20 minutes) needed to bill these codes.²⁴ While CCM is not directly tied to specific patient visits, revenue generated from CCM billing could be used to financially justify pharmacist practicing in a split-shared telehealth model.

Finally, much of the work to date on financial justification of pharmacy services has focused on developing billing models for pharmacist in the primarily fee-for-service landscape. However, healthcare payment is undergoing a steady transition into a more value-based payment system, focused on outcomes of populations. In these models (for instance, accountable care organizations, alternative payment models, etc.) pharmacists certainly have an important role to play in helping patients reach their health goals, but in the meantime, pharmacists must do what they can to maximize their fee-for-service revenue while simultaneously providing high-quality care to positively impact quality measures that drive value-based payments. The split-shared model addresses these goals by improving both the revenue generated by the visits and through the teamwork inherently created by this model. As the payment landscape continues to change, the patient-provider-pharmacist relationships created now will be critical in ensuring success in a value-based system.

Conclusion

The authors strongly support changes to laws and regulations currently limiting the ability of pharmacists to bill directly for clinical services. However, in the setting of current limitations, we advocate for increased utilization of shared visits and split shared visits as a viable method to generate revenue and aid in the justification of clinical pharmacy services. Especially in the context of a global pandemic, in which access to expanded telemedicine services is a key component of successful patient care services, the utilization of creative methods to engage patients and contribute to improved patient health outcomes while simultaneously contributing to the financial health of community health centers is critical.

In conclusion, our novel, pharmacist-physician split-shared tele-visit model not only contributed to increased reimbursable visits, but also improved A1c significantly, and contributed to improved patient and provider satisfaction with diabetes management.

Acknowledgement: None

Funding: This manuscript received no specific grant from any funding agency.

Conflicts of Interest: We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript, including grants (pending or received), employment, gifts, stock holdings or options, honoraria, consultancies, expert testimony, patents, and royalties.

Treatment of Human Subjects: None

The opinions expressed in this paper are those of the authors.

References

- DiPiro JT, Fox ER, Kesselheim AS, et al. ASHP Foundation pharmacy forecast 2021: strategic planning advice for pharmacy departments in hospitals and health systems. *Am J Health Syst Pharm.* 2021;78(6):472-497. doi:10.1093/ajhp/zxaa429
- Aneese NJ, Halalau A, Muench S, Shelden D, Fett J, Lauster C. Impact of a pharmacist-managed diabetes clinic on quality measures. *Am J Manag Care.* 2018;24(4 Spec No.):SP116-SP119.
- Niznik JD, He H, Kane-Gill SL. Impact of clinical pharmacist services delivered via telemedicine in the outpatient or ambulatory care setting: a systematic review. *Res Social Adm Pharm.* 2018;14(8):707-717. doi:10.1016/j.sapharm.2017.10.011
- Randolph LA, Walker CK, Nguyen AT, Zachariah SR. Impact of pharmacist interventions on cost avoidance in an ambulatory cancer center. *J Oncol Pharm Pract.* 2018;24(1):3-8. doi:10.1177/1078155216671189
- Bowers BL, Drew AM, Verry C. Impact of pharmacist-physician collaboration on osteoporosis treatment rates. *Ann Pharmacother.* 2018;52(9):876-883. doi:10.1177/1060028018770622
- Nguyen PV, Martínez AV. Impact of pharmacist interventions in an ambulatory geriatric care clinic: the IMPACC study. *Sr Care Pharm.* 2020;35(5):230-236. doi:10.4140/TCP.n.2020.230
- Sanchez GM, Douglass MA, Mancuso MA. Revisiting project Re-Engineered Discharge (RED): the impact of a pharmacist telephone intervention on hospital readmission rates. *Pharmacotherapy.* 2015;35(9):805-812. doi:10.1002/phar.1630
- Ravn-Nielsen LV, Duckert ML, Lund ML, et al. Effect of an in-hospital multifaceted clinical pharmacist intervention on the risk of readmission: a randomized clinical trial. *JAMA Intern Med.* 2018;178(3):375-382. doi:10.1001/jamainternmed.2017.8274
- Hall JJ, Katz SJ, Cor MK. Patient satisfaction with pharmacist-led collaborative follow-up care in an ambulatory rheumatology clinic. *Musculoskeletal Care.* 2017;15(3):186-195. doi:10.1002/msc.1160
- Office of the Surgeon General. Benjamin R. Letter to Scott Giberson. Dec 14, 2011. Accessed June 30, 2021. http://www.accp.com/docs/positions/misc/Support_Letter_from_US_Surgeon_General.pdf
- Centers for Medicare & Medicaid Services. CY 2021 Medicare physician fee schedule final rule. CMS-1734-F. December 28, 2020. Accessed July 5, 2021. <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeeschedpfs-federal-regulation-notices/cms-1734-f>
- Rodis JL, Capesus TR, Rainey JT, Awad MH, Fox CH. Pharmacists in Federally Qualified Health Centers: models of care to improve chronic disease. *Prev Chronic Dis.* 2019;16:E153. doi:10.5888/pcd16.190163
- Gonzalvo JD, Kenneally AM, Pence L, et al. Reimbursement outcomes of a pharmacist-physician co-visit model in a Federally Qualified Health Center. *J Am Coll Clin Pharm.* 2021;4(6):667-673. doi:10.1002/jac5.1416
- Ulrich IP, Patel S, Gilmer B. Evaluation of a pharmacist-physician covisit model in a family medicine practice. *J Am Pharm Assoc (2003).* 2019;59(1):129-135. doi:10.1016/j.japh.2018.09.010
- Roll A, Pattison D, Baumgartner R, Sublett L, Brown B. The design and evaluation of a pilot covisit model: integration of a pharmacist into a primary care team. *J Am Pharm Assoc (2003).* 2020;60(3):491-496. doi:10.1016/j.japh.2019.11.017
- Peterson J, Hinds A, Garza A, et al. Impact of physician-pharmacist covisits at a primary care clinic in patients with uncontrolled diabetes. *J Pharm Pract.* 2020;33(3):321-325. doi:10.1177/0897190018807374
- Community health center delivery sites and patient visits. KFF's State Health Facts. Updated March 2021. Accessed July 26, 2021. <https://www.kff.org/other/state-indicator/community-health-center-sites-and-visits>
- Number of Medicare certified rural health clinics. KFF's State Health Facts. Updated January 21, 2020. Accessed July 26, 2021. <https://www.kff.org/other/state-indicator/total-rural-health-clinics/>
- Medicare telemedicine health care provider fact sheet. Centers for Medicare & Medicaid Services. March 17, 2020. Accessed August 2, 2021. <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>
- Niznik JD, He H, Kane-Gill SL. Impact of clinical pharmacist services delivered via telemedicine in the outpatient or ambulatory care setting: a systematic review. *Res Social Adm Pharm.* 2018;14(8):707-717. doi:10.1016/j.sapharm.2017.10.011

21. Centers for Medicare & Medicaid Services. Transitional Care Management Services Fact Sheet. ICN 908628. Published Jun 2013. Accessed Aug 2, 2021. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/Care-Management>
22. Gleason KM, Groszek JM, Sullivan C, Rooney D, Barnard C, Noskin GA. Reconciliation of discrepancies in medication histories and admission orders of newly hospitalized patients. *Am J Health Syst Pharm*. 2004;61(16):1689-1695. doi:10.1093/ajhp/61.16.1689
23. Ruiz B, García M, Aguirre U, Aguirre C. Factors predicting hospital readmissions related to adverse drug reactions. *Eur J Clin Pharmacol*. 2008;64(7):715-722. doi:10.1007/s00228-008-0473-y
24. Centers for Medicare & Medicaid Services. CY 2021 Medicare Benefit Policy Manual 100-02, Chapter 13 §230. April 26, 2021. Accessed March 16, 2022. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/bp102c13.pdf>