



ARTICLE ON ANALYZING COLLABORATIVE CARE MODELS IN INTEGRATING PHARMACY SERVICES INTO GENERAL MEDICAL PRACTICE

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Abstract

Collaborative care models integrating pharmacy services into general medical practice have emerged as a promising strategy to enhance patient care and optimize medication management. This article looks at different models of care, including coordinated pharmacy store models, teleconferencing models, and changes in care models. The pharmacist's role in providing



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compelling pharmaceutical administration and clinical care and understanding instruction is emphasized. The benefits of coordinated pharmacy store administrations include expanded medicine adherence, made strides in clinical results, and fetched reserve funds. To encourage broad utilization, repayment and collaboration must be attended to. The collaborative care demonstration provides a vital system for advancing collaboration and improving well-being outcomes.

Keywords

1. Collaborative care models
2. Pharmacy services
3. General medical practice
4. Pharmacists
5. Medication management
6. Interdisciplinary collaboration
7. Medication reconciliation
8. Patient education
9. Medication adherence
10. Healthcare outcomes

Introduction

Collaborative care models, particularly the usage of pharmacy store administrations, have pulled in much consideration over a long time. Integrating pharmacy specialists into basic care settings has the potential to progress persistent care, move forward health outcomes, and progress medicine administration. This article provides an in-depth look at different shapes of coordinated care that coordinate pharmacy store administrations into hone. The talk centers on the significance of the benefits, challenges, and results of setting up these guidelines. Through comprehensive assessment, we look to illustrate that this association can improve patients' well-being and well-being (Lat et., al 2020).

The Role of Pharmacists in Collaborative Care

Physicians are a vital portion of the collaborative care show; They assist patients with their mastery of pharmaceutical administration, coordination, understanding instruction, and follow-up care. Their one-of-a-kind abilities in medicine administration, information of sedate intuition, and understanding of side impacts make them important to the healthcare group. In this article, we investigate the different parts of pharmacy specialists in collaborative care, highlighting their

commitment to improving understanding of results and advancing positive outcomes for care (Karam et., al 2021).

Comprehensive Medication Management

One of the duties of the pharmacy specialist within the facilitated care model is to supply compelling medication management. This includes assessing the patient's medicine regimen, distinguishing medication-related issues, and optimizing treatment to attain desired well-being results. pharmacy specialists utilize sedate treatment data to supply suitable pharmaceutical choices, measurement alterations, and checking based on persistent needs (Van der Linden et., al 2020). By collaborating with doctors and other healthcare experts, pharmacy specialists offer assistance in diminishing pharmaceutical blunders, decreasing antagonistic sedate responses, and making strides in medicine safety.

Medication Reconciliation

Pharmaceutical collaboration is an imperative viewpoint of collaborative care in healthcare, particularly amid move times (Hatton et., al 2021). Doctors are vital in planning diverse medical records, giving precise medical histories, and avoiding pharmaceutical mistakes. By carefully looking into restorative records, communicating with patients and caregivers, and collaborating with the therapeutic group, pharmacy specialists can offer assistance to encourage continuous alteration and advance progression of care. By settling inconsistencies and clarifying pharmaceutical information, pharmacy specialists offer assistance to diminish the chance of unfavorable occasions and progress in understanding results amid the adherence process.



(Hatton et., al 2021).

Patient Education

Pharmacists act as teachers and advocates for patients, permitting them to take an interest in their claim of well-being care. Through persistent interviews, pharmacy specialists give critical data about the medicine utilized, side impacts, and methodologies to progress with clinical results. They address quiet concerns, clarify medical information, and advance medical adherence through instructive intercessions. pharmacy specialists encourage decision-making by including patients in treatment arranging, arrangement, and selecting treatment choices. By advancing understanding and association, pharmacy specialists offer assistance in making strides in pharmaceutical adherence, treatment adherence, and general health.

Adherence Monitoring

Monitoring compliance with medicine is imperative to make strides in treatment and anticipate medical complications. pharmacy specialists utilize various methodologies to survey and screen understanding behavior, counting medicine information, medicine checks, and understanding data (Khang, A. (Ed.)2023). Through customary perception and patient communication, pharmacy specialists recognize obstructions to adherence, resolve pharmaceutical issues, and actualize intercessions to progress results. By observing adherence and giving quiet bolster, pharmacy specialists offer assistance to make strides in therapeutic results, decrease restorative costs, and decrease the hazard of antagonistic outcomes positively associated with nonadherence to health.

Types of Collaborative Care Models

Collaborative care models have developed viable methodologies for making strides in quiet care by experts collaborating with the healthcare group. This demonstration incorporates numerous strategies reasonable for distinctive hones and patients. This article looks at three viable collaborative care models: the coordinated pharmacy specialist demonstration, the tele pharmacist discussion demonstration, and the care move demonstration. Each show has special focal points and addresses particular medications, making a difference in progressing quiet results and pharmaceutical management (Alowais et., al 2023).

Co-located Pharmacist Model

The pharmacy specialist collaborator show includes specialists working with other doctors within the same office, such as an essential care clinic or outpatient care office. In this show, pharmacy specialists work with specialists, nurses, and other experts to supply quality care to patients. Collaboration encourages consistent communication and energizes collaborative work, permitting pharmacy specialists to make persistent care decisions (Anghel et., al 2020).

Key Components of the Co-located Pharmacist Model

- ✓ Coordinate Understanding Care: Doctors regulate pharmaceuticals, endorse pharmaceuticals, and communicate with the patient to resolve medication-related issues and progress outcomes.
- ✓ Collaborative collaboration: Specialists work with other specialists to create care plans, screen persistent advances, and alter treatment accordingly.
- ✓ Sedate security: Doctors review pharmacy's, recognize potential medication interactions, and anticipate mishandling. It plays an important role in guaranteeing the security of medicines.
- ✓ Understanding Instruction: pharmacy specialists inform patients about solutions, side effects, and methodologies to assist them in managing their physical health (Brown et., al 2021).

Benefits of the Co-located Pharmacist Model

- ✓ Made strides Persistent Results: By partaking in understanding care, pharmacy specialists contribute to better pharmaceutical conveyance, diminished readmissions, and administration of unremitting conditions (McCartyP et., al 2021).
- ✓ Move forward medicine administration: Specialists specializing in pharmaceutical treatment and administration can make strides in pharmaceutical use and decrease the chance of unfavorable sedate reactions.
- ✓ Improving healthcare: The collaboration of pharmacy specialists in restorative offices encourages the communication and coordination of care, guaranteeing the adequacy of administrations and lessening restorative costs.

Remote Pharmacist Consultation Model

The tele pharmacist interview demonstration is outlined for ranges where physical coordination of pharmacy specialists could be more conceivable, such as rustic zones or treatment. In this demonstration, pharmacy specialists give consultative administrations to essential care suppliers through communication innovation, including video conferencing, phone, or moment messaging (Hermansyah et., al 2020).

Key Components of the Remote Pharmacist Consultation Model

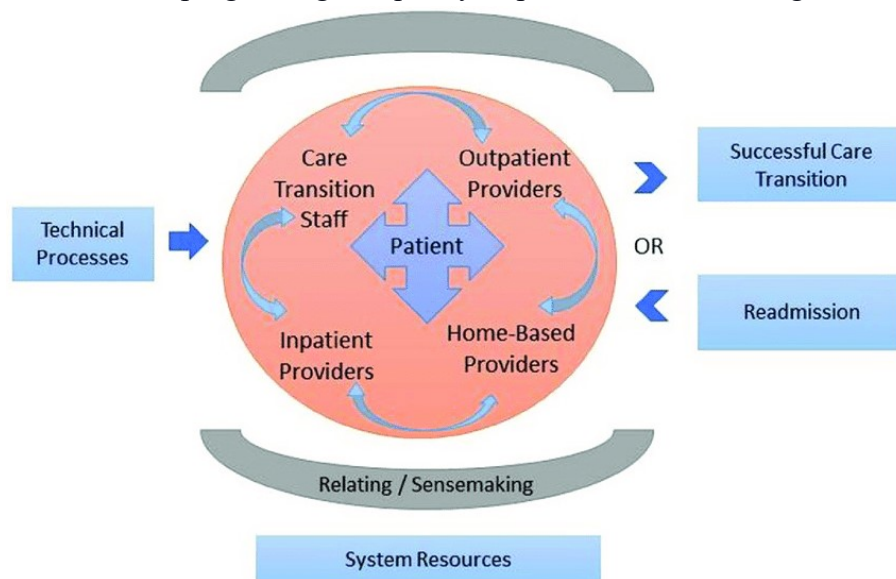
- ✓ Doctor Collaborator Administrations: Doctors give pharmaceutical administration, audit persistent records, and give great criticism for assisting in chemotherapy treatment (Ferreri et., al 2020).
- ✓ Shared decision-making: Specialists work with essential care suppliers to resolve pharmacy-related issues, create treatment plans, and screen patients.
- ✓ Quiet engagement: pharmacy specialists lock in with patients through virtual discussions to supply medicine counseling, instruction, and progress medicine adherence and self-management.

Benefits of the Remote Pharmacist Consultation Model

- ✓ Get-to-pharmacy Store Administrations: Tele pharmacy administrations extend get-to-pharmacy-store expertise to patients in underserved or mobility-restricted areas.
- ✓ Progression of Care: pharmacy specialists encourage progression of care by giving telemedicine administration administrations amid moves between healthcare facilities.
- ✓ Reasonable Administrations: Phone meetings decrease the requirement for in-person visits and give fetched reserve funds for patients. Healthcare frameworks while giving quality care.

Transitions of Care Model

The moving show of care centers on guaranteeing the progression of care when an understanding moves between clinical settings, such as a release clinic or exchange to a long-term care office (White et., al 2022). During this basic period, pharmacy specialists play a critical part in encouraging alteration and progressing the quality of pharmaceutical management.



(Garcia-Cardenas et., al 2020).

Key Components of the Transitions of Care Model

- ✓ Sedate Modification: Specialists share medicines amid corrections, make them accurately, apply them completely, and prevent pharmacy abuse.
- ✓ Quiet instruction and counseling: pharmacy specialists teach patients approximately the right utilization of medicine solutions, counting their viability and the significance of medicine compliance (Manley et., al 2020).
- ✓ Care Coordination: pharmacy specialists work with healing centre groups, essential care doctors, and other suppliers to arrange care, counting planning, and planning backups.

Benefits of the Transitions of Care Model

- ✓ Decreasing Readmission Rates: Doctors are included in changing care to diminish readmissions through cost-effective medication-related arrangements and guaranteeing coherence of care.
- ✓ Progressing Healthcare: Sharing pharmacy by pharmacy specialists decreases the chance of risky and inaccurate solutions when changing healthcare environments.
- ✓ Increased patient fulfillment: Patients get self-medication instruction and back from pharmacy specialists, resulting in expanded fulfillment with the method and expanded information on general health (Lim et., al 2021).

Benefits of Integrating Pharmacy Services

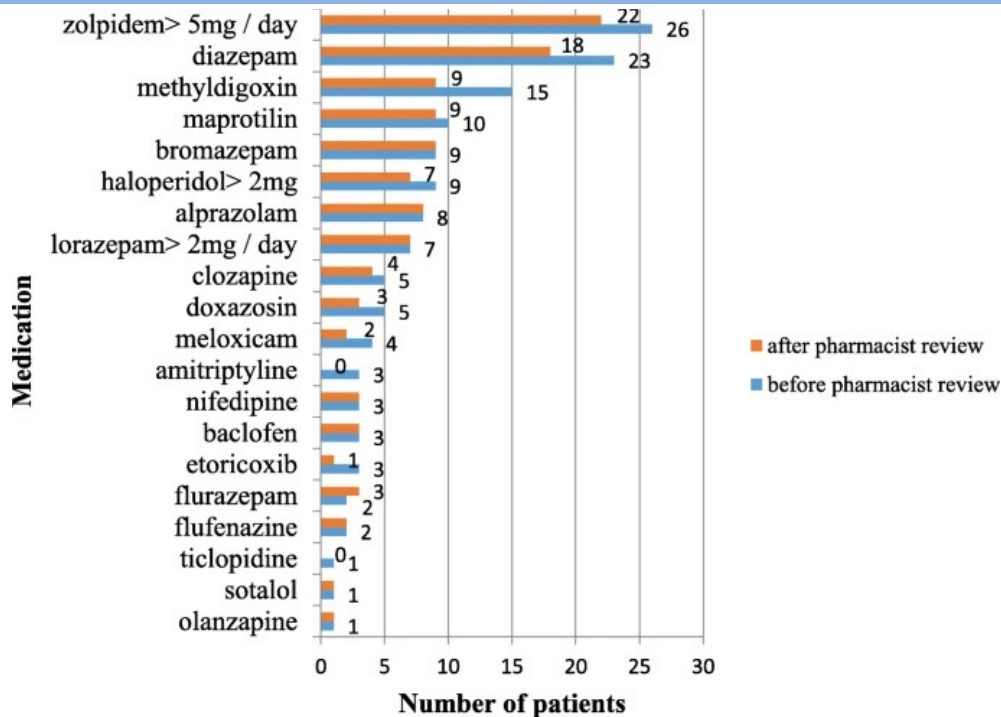
Integrating pharmacy stores into healthcare conveyance through a coordinated care show has numerous benefits for patients, doctors, and medications. This article investigates three key benefits of Integrating pharmacy store administrations:

- Moving forward in medicine administration
- Making strides in understanding results
- Fetching savings

Improved Medication Management

One of the key benefits of coordinating pharmacy store administrations in the healthcare environment is moving forward with pharmaceutical administration. pharmacy specialists play a critical part in endorsing pharmacy to personal patients through their specialized medication information and clinical encounters. Their association guarantees fitting pharmaceutical determination, organization, testing, and quiet instruction, driving to more compelling medicine use (Crespo-Gonzalez et., al 2020).

Doctors perform sedation audits, distinguish potential medication intuitively, and screen quiet compliance. By collaborating with other healthcare suppliers, pharmacy specialists offer assistance to anticipate medicine blunders, decrease unfavourable sedate responses, and make strides in pharmaceutical security. pharmacy specialists decrease the chance of irregularities and medication-related issues by checking the exactness and completeness of the pharmaceutical list through the pharmaceutical adjustment handle amid adjustment.



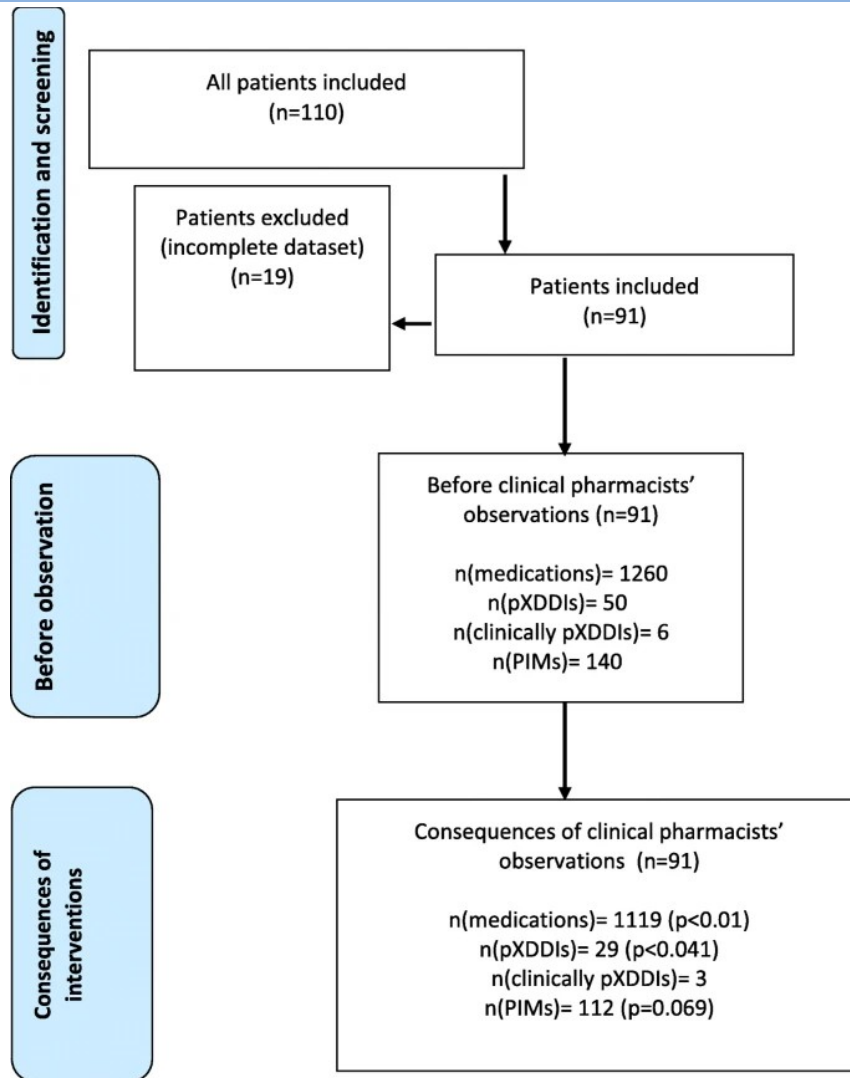
Number of patients with PIM sometime recently and after doctor audit of the PRISCUS survey (Bally et., al 2020).

Moreover, pharmacy specialists give exhortation and instruction, empowering patients to participate in their care. pharmacy specialists offer assistance in the progress, understanding, and self-management of solutions by tending to patients' concerns, giving data on pharmaceutical utilization and side impacts, and giving techniques to extend compliance (Yonek et., al 2020).

Enhanced Patient Outcomes

Pharmacy's Pharmacy-facilitated care models are related to superior clinical results for patients. Including pharmacy specialists in understanding care can increment medicine adherence, improve disease control, and eventually improve well-being results. Through mediation, pharmacy specialists assist patients in accomplishing treatment objectives, overseeing chronic disorders, and decreasing malady risk (Sum et., al 2022).

Pharmacists are vital in advancing pharmaceutical adherence by recognizing adherence issues and actualizing mediations to resolve these issues. By giving continuous bolstering, instruction, and care, pharmacy specialists assist patients in overcoming pharmacy-related issues and moving forward with their results in general well-being. Inquire about how collaborative models with pharmacy specialists can increment persistent compliance, decrease hospitalizations, and improve patients' quality of life (Dineen-Griffin et., al 2020).



At the end of the study, patients received 1119 medications in total (mean 12.3, median 12), which is 141 fewer than they received before the CP's review (total number of prescribed medications decreased by 11.2%). Patients, whose GPs accepted the CPs' recommendations, overall had fewer medications per patient compared to those whose GPs did not accept the recommendations (Mann-Whitney's U test; $U = 68,000$; $p < 0.01$).

Cost Savings

Integrating pharmacy administrations into a facilitated care demonstration can assist you in saving on healthcare costs and moving forward with understanding results. Collaborative care models offer assistance to diminish medication utilization and related costs by avoiding pharmacy-related complications, unfavorable occasions, and readmissions. Pharmacological mediation can move pharmaceutical administration forward and diminish the requirement for therapeutic administrations and crisis office visits (Rawlinson et., al 2021).

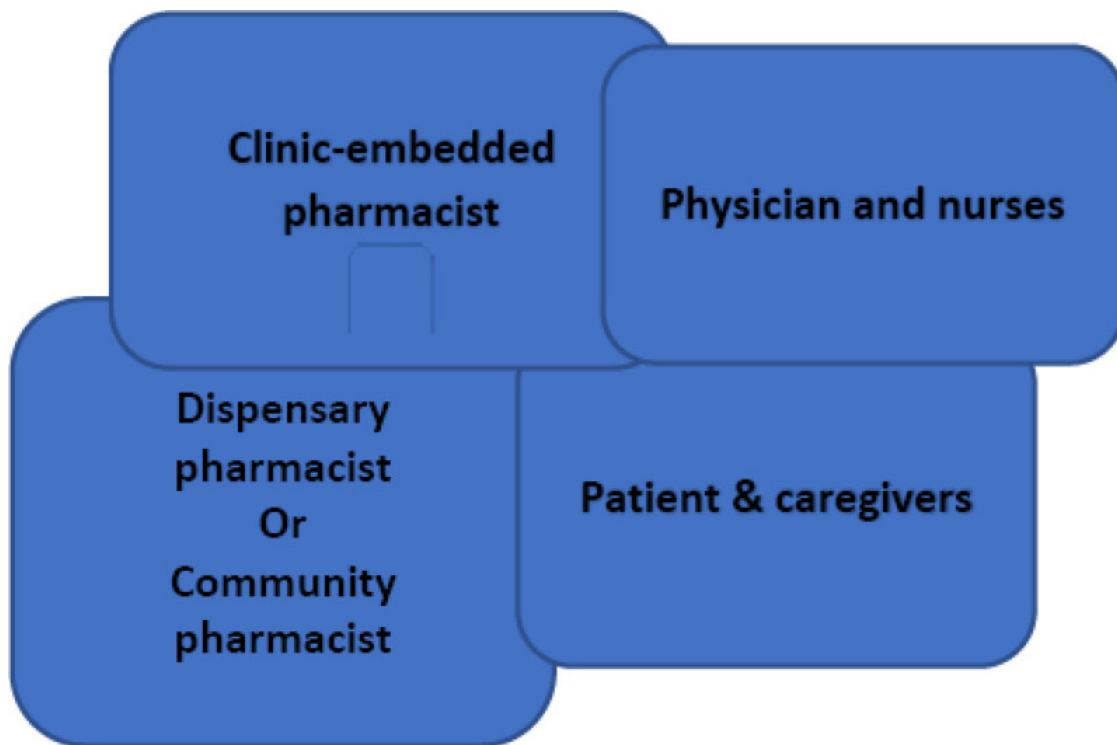
The involvement of pharmacy specialists within the medicine organization can make strides in the comfort of medicine utilized and, increment, the adequacy of endorsing. With their ability in Pharmacoeconomics, pharmacy specialists offer assistance in recognizing cost-effective sedate utilization, optimizing medicate utilization, and maximizing esteem for cash through in healthcare (Rocks et., al 2020).

Challenges and Considerations in Integrating Pharmacy Services

While solidification has numerous benefits, a few challenges and choices must be addressed when integrating pharmacy dissemination administrations into coordinated care models to realize victory and far-reaching utilization. This article examines three fundamental subjects: repayment issues, proficient communication, and teamwork.

Reimbursement Issues

Repayment is one of the greatest challenges in coordinating pharmacy stores into facilitated care. Even though pharmacist-led intercessions have been demonstrated to improve understanding results and decrease healthcare costs, current healthcare repayment frameworks frequently need to pay pharmacy specialists for their administrations satisfactorily. The Need for repayment may affect the supportability and capacity of collaborative administrators, hindering their appropriation in numerous healthcare settings (Czypionka et., al 2020).



(Czypionka et., al 2020).

Clinical inhabitant pharmacy specialists act as middlemen for specialists, medical attendants, healing center pharmacy specialists, community pharmacy specialists, patients, and carers.

Physician commitments to understanding care, such as medicine administration, counseling, and pharmaceutical compromise, are only sometimes recognized or repaid by third-party payers. Healthcare organizations may need help defending the fetches of utilizing pharmacy specialists in bunch talks, particularly in kept settings. Tending to repayment issues requires backing to illustrate the esteem of pharmacist-led intercessions in progressing persistent results, lessening medicine utilization, and medicine safety (Deschodt et., al 2020).

Interprofessional Communication

Effective communication and collaboration between pharmacy specialists and other healthcare suppliers are vital to the victory of a facilitated care demonstration. Be that as it may, fruitful communication between group individuals can be troublesome due to contrasts in the proficient foundation, communication abilities, and authority styles. Without clear forms and methods, errors, clashes, and irregularities in care can happen, which can well affect quiet security and control of care (Wolfe et., al 2020).

Interprofessional communication issues can anticipate the trade of imperative data such as medicine changes, persistent inclinations, and treatment objectives, driving pharmaceutical mistakes and care issues. To overcome these challenges, healthcare organizations must contribute to collaborative learning and preparation that cultivates collaboration, cooperation, and doctor solidarity (Hughes et., al 2020). Utilizing well-being innovation devices such as electronic well-being records and secure informing locales can encourage opportune communication and sharing of time and data among group members.

Workflow Integration

Integrating pharmacy store administrations into existing workflows presents another critical challenge within the hand-in-hand usage of a clinical care show. Healthcare organizations can be safe to alter since changing existing capacities and transitioning to unused capacities can disturb set-up forms and operations. pharmacy specialists may confront challenges in picking up acknowledgment and acknowledgment as vital individuals of the collaborative group, particularly if their parts and obligations must be characterized and coordinated with the existing home environment (Albassam et., al 2020).

The challenge of working in a joint wander will incorporate issues regarding clear obligations, scope, work grants, and time limits. Healthcare organizations should include partners (such as pharmacy specialists, doctors, medical attendants, and directors) within the work overhaul handle to guarantee that the pharmacy store is coordinated into the understanding care handle. By

collaboratively distinguishing wasteful aspects, streamlining forms, and making strides in asset utilization, healthcare organizations can overcome these issues, ensure coordination, and make the foremost of a shared care model (Ee et., al 2020).

Patients and data stream from specialists and community pharmacy specialists through pharmacists.



(Rajan et., al 2020).

Conclusion

In conclusion, facilitated care shows that coordinating pharmacy store administrations into the general healthcare framework gives a compelling way to make strides in quiet care and progressed medicine administration. These models, which use the aptitudes and information of pharmacy specialists and energize collaborative endeavors, have the potential to make strides in well-being results and progress asset utilization. However, overcoming challenges such as repayment issues and collaboration is vital to harvesting the benefits of these collaborations in numerous healthcare settings. By working successfully to address these issues and supporting the integration of pharmacy stores into collaborative care groups, healthcare organizations can progress patient care and advance changes in care.

Reference

- Ee, C., Lake, J., Firth, J., Hargraves, F., De Manincor, M., Meade, T., ... & Sarris, J. (2020). An integrative collaborative care model for people with mental illness and physical comorbidities. *International Journal of Mental Health Systems*, *14*, 1-16. <https://link.springer.com/article/10.1186/s13033-020-00410-6>
- Albassam, A., Almohammed, H., Alhujaili, M., Koshy, S., & Awad, A. (2020). Perspectives of primary care physicians and pharmacists on interprofessional collaboration in Kuwait: A quantitative study. *PloS one*, *15*(7), e0236114. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0236114>
- Rajan, R., Brennan, L., Bloem, B. R., Dahodwala, N., Gardner, J., Goldman, J. G., ... & Eggers, C. (2020). Integrated care in Parkinson's disease: a systematic review and

- meta-analysis. *Movement Disorders*, 35(9), 1509-1531. <https://movementdisorders.onlinelibrary.wiley.com/doi/abs/10.1002/mds.28097>
- Hughes, G., Shaw, S. E., & Greenhalgh, T. (2020). Rethinking integrated care: a systematic hermeneutic review of the literature on integrated care strategies and concepts. *The Milbank Quarterly*, 98(2), 446-492. <https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-0009.12459>
- Wolfe, I., Satherley, R. M., Scotney, E., Newham, J., & Lingam, R. (2020). Integrated care models and child health: a meta-analysis. *Pediatrics*, 145(1). <https://publications.aap.org/pediatrics/article-abstract/145/1/e20183747/37018>
- Deschodt, M., Laurent, G., Cornelissen, L., Yip, O., Zuniga, F., Denhaerynck, K., ... & De Geest, S. (2020). Core components and impact of nurse-led integrated care models for home-dwelling older people: A systematic review and meta-analysis. *International journal of nursing studies*, 105, 103552. <https://www.sciencedirect.com/science/article/pii/S0020748920300377>
- Czypionka, T., Kraus, M., Reiss, M., Baltaxe, E., Roca, J., Ruths, S., ... & Rutten-van Mölken, M. (2020). The patient at the centre: evidence from 17 European integrated care programmes for persons with complex needs. *BMC health services research*, 20, 1-14. <https://link.springer.com/article/10.1186/s12913-020-05917-9>
- Rocks, S., Berntson, D., Gil-Salmerón, A., Kadu, M., Ehrenberg, N., Stein, V., & Tsiachristas, A. (2020). Cost and effects of integrated care: a systematic literature review and meta-analysis. *The European Journal of Health Economics*, 21, 1211-1221. <https://link.springer.com/article/10.1007/s10198-020-01217-5>
- Rawlinson, C., Carron, T., Cohidon, C., Arditi, C., Hong, Q. N., Pluye, P., ... & Gilles, I. (2021). An overview of reviews on interprofessional collaboration in primary care: barriers and facilitators. *International Journal of Integrated Care*, 21(2). <https://link.springer.com/article/10.1007/s10198-020-01217-5>
- Rawlinson, C., Carron, T., Cohidon, C., Arditi, C., Hong, Q. N., Pluye, P., ... & Gilles, I. (2021). An overview of reviews on interprofessional collaboration in primary care: barriers and facilitators. *International Journal of Integrated Care*, 21(2). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8231480/>
- Dineen-Griffin, S., Benrimoj, S. I., & Garcia-Cardenas, V. (2020). Primary health care policy and vision for community pharmacy and pharmacists in Australia. *Pharmacy Practice (Granada)*, 18(2). https://scielo.isciii.es/scielo.php?pid=S1885-642X2020000200020&script=sci_arttext&tlng=pt

- Sum, G., Lau, L. K., Jabbar, K. A., Lun, P., George, P. P., Munro, Y. L., & Ding, Y. Y. (2022). The World Health Organization (WHO) Integrated Care for Older People (ICOPE) Framework: A Narrative Review on Its Adoption Worldwide and Lessons Learnt. *International Journal of Environmental Research and Public Health*, 20(1), 154. <https://www.mdpi.com/1660-4601/20/1/154>
- Yonek, J., Lee, C. M., Harrison, A., Mangurian, C., & Tolou-Shams, M. (2020). Key components of effective pediatric integrated mental health care models: a systematic review. *JAMA pediatrics*, 174(5), 487-498. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2762010>
- Crespo-Gonzalez, C., Benrimoj, S. I., Scerri, M., & Garcia-Cardenas, V. (2020). Sustainability of innovations in healthcare: A systematic review and conceptual framework for professional pharmacy services. *Research in Social and Administrative Pharmacy*, 16(10), 1331-1343. <https://www.sciencedirect.com/science/article/pii/S1551741119306783>
- Brewster, S., Holt, R., Portlock, J., & Price, H. (2020). The role of community pharmacists and their position in the delivery of diabetes care: an update for medical professionals. *Postgraduate medical journal*, 96(1138), 473-479. <https://academic.oup.com/pmj/article-abstract/96/1138/473/6958966>
- Karam, M., Chouinard, M. C., Poitras, M. E., Couturier, Y., Vedel, I., Grgurevic, N., & Hudon, C. (2021). Nursing care coordination for patients with complex needs in primary healthcare: A scoping review. *International Journal of Integrated Care*, 21(1). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7977020/>
- Manley, K., & Jackson, C. (2020). The Venus model for integrating practitioner-led workforce transformation and complex change across the health care system. *Journal of Evaluation in Clinical Practice*, 26(2), 622-634. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.13377>
- Lat, I., Paciullo, C., Daley, M. J., MacLaren, R., Bolesta, S., McCann, J., ... & Meyer, T. A. (2020). Position paper on critical care pharmacy services: 2020 update. *Critical care medicine*, 48(9), e813-e834. <https://www.ingentaconnect.com/content/wk/ccm/2020/00000048/00000009/art00012>
- Van der Linden, L., Hias, J., Walgraeve, K., Flamaing, J., Tournoy, J., & Spriet, I. (2020). Clinical pharmacy services in older inpatients: an evidence-based review. *Drugs & aging*, 37, 161-174. <https://link.springer.com/article/10.1007/s40266-019-00733-1>

- Garcia-Cardenas, V., Rossing, C. V., Fernandez-Llimos, F., Schulz, M., Tsuyuki, R., Bugnon, O., ... & Benrimoj, S. I. (2020). Pharmacy practice research—a call to action. *Research in Social and Administrative Pharmacy*, 16(11), 1602-1608. <https://www.sciencedirect.com/science/article/pii/S1551741120301819>
- White, J., Byles, J., & Walley, T. (2022). The patient experience of telehealth access and clinical encounters in Australian health care during COVID-19: implications for enhancing integrated care. *Journal of Integrated Care*, 30(4), 386-398. <https://www.emerald.com/insight/content/doi/10.1108/JICA-05-2021-0024/full/html>
- Ferreri, S. P., Hughes, T. D., & Snyder, M. E. (2020). Medication therapy management: current challenges. *Integrated Pharmacy Research and Practice*, 71-81. <https://www.tandfonline.com/doi/full/10.2147/IPRP.S179628>
- Hermansyah, A., Wulandari, L., Kristina, S. A., & Meilianti, S. (2020). Primary health care policy and vision for community pharmacy and pharmacists in Indonesia. *Pharmacy Practice (Granada)*, 18(3). https://scielo.isciii.es/scielo.php?pid=S1885-642X2020000300018&script=sci_arttext&tlng=en
- Hatton, K., Bhattacharya, D., Scott, S., & Wright, D. (2021). Barriers and facilitators to pharmacists integrating into the ward-based multidisciplinary team: a systematic review and meta-synthesis. *Research in Social and Administrative Pharmacy*, 17(11), 1923-1936. <https://www.sciencedirect.com/science/article/pii/S1551741121000668>
- Khang, A. (Ed.). (2023). *AI and IoT-Based Technologies for Precision Medicine*. IGI Global. <https://books.google.com/books?hl=en&lr=&id=uVfgEAAAQBAJ&oi=fnd&pg=PP1&dq=Article+on+Analyzing+Collaborative+Care+Models+in+Integrating+Pharmacy+Services+into+General+Medical+Practice&ots=K2W9y0JngK&sig=QFnQyapbaBbxS9V14VqydXpalSo>
- Alowais, S. A., Alghamdi, S. S., Alsuhebany, N., Alqahtani, T., Alshaya, A. I., Almohareb, S. N., ... & Albekairy, A. M. (2023). Revolutionizing healthcare: the role of artificial intelligence in clinical practice. *BMC Medical Education*, 23(1), 689. <https://link.springer.com/article/10.1186/s12909-023-04698-z>
- Anghel, I., Cioara, T., Moldovan, D., Antal, M., Pop, C. D., Salomie, I., ... & Chifu, V. R. (2020). Smart environments and social robots for age-friendly integrated care services. *International Journal of Environmental Research and Public Health*, 17(11), 3801. <https://www.mdpi.com/1660-4601/17/11/3801>
- McCarty, C. A., Zatzick, D. F., Marcynyszyn, L. A., Wang, J., Hilt, R., Jinguji, T., ... & Rivara, F. P. (2021). Effect of collaborative care on persistent postconcussive symptoms in

- adolescents: a randomized clinical trial. *JAMA network open*, 4(2), e210207-e210207. <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2776909>
- Brown, C. L., & Menec, V. (2021). Measuring processes of integrated care for hospital to home transitions. *International Journal of Integrated Care*, 21(2). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8086722/>
- Lim, W. M. (2021). A marketing mix typology for integrated care: the 10 Ps. *Journal of Strategic Marketing*, 29(5), 453-469. <https://www.tandfonline.com/doi/abs/10.1080/0965254X.2020.1775683>
- Bally, E. L., & Cesuroglu, T. (2020). Toward integration of mHealth in primary care in the Netherlands: a qualitative analysis of stakeholder perspectives. *Frontiers in public health*, 7, 407. <https://www.frontiersin.org/articles/10.3389/fpubh.2019.00407/full>