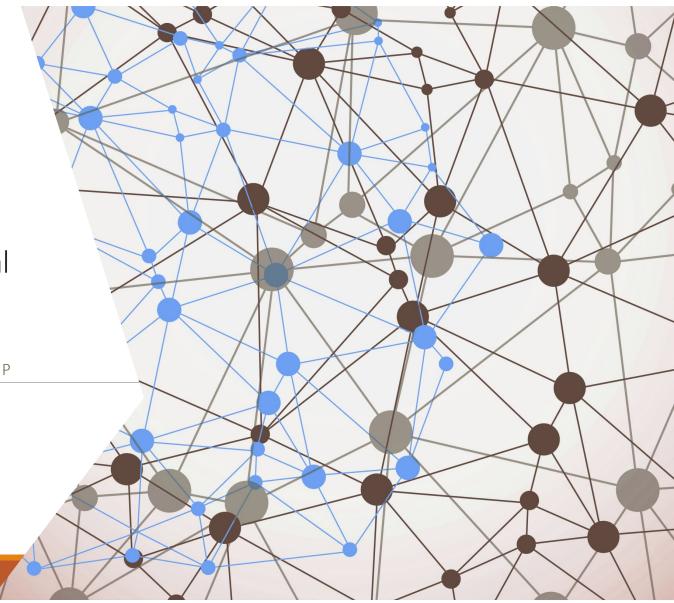
Utilizing Pharmacists as Entry Points to Behavioral Health Care Services & Care Management

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APRIL 22, 2023



Disclosures

• Dr. Montes does not have any financial or other relationships to disclose.

Objectives

- Explain the impact of pharmacist involvement in existing practice models
- Describe innovative models that utilize pharmacists as entry points in acute care and community care settings

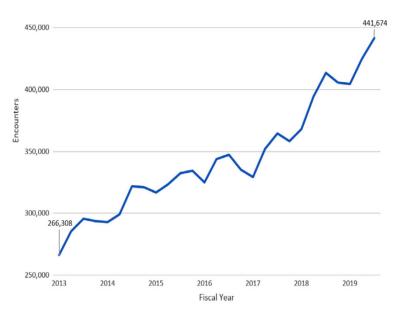
Pharmacist Role Expansion in Psychiatric Practice

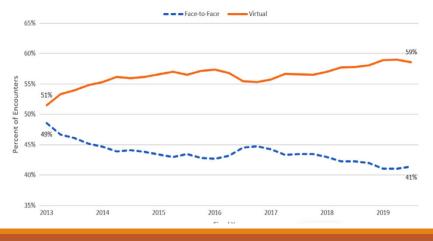
2010+	Patient-centered medical homes, CMM, medication management services Telehealth	Collaboration with PCPs, other specialists in coordinating care—CMM Improved access to care in more settings as advanced practice providers Value-based care Substance use recovery
2020+	HMOs and DMH clinics across country recruit BCPPs to provide direct patient care Psychotropic stewardship	Drug policy development Rational deprescribing Improved drug safety Expand access to quality mental health care

CMM = comprehensive medication management; DMH = Department of Mental Health; EPSE = extrapyramidal side effects; HMO = health maintenance organization; LAI = long-acting injectable; PCP = primary care provider; VHA = Veterans Health Administration.



Proven Results





Veterans Affairs Patient Aligned Care Team Patient Centered Medical Home Model ¹

- •VA Patient Aligned Care Team (PACT) Patient Centered Medical Home (PCMH) Model
 - Integrated clinical pharmacy specialists with prescriptive authority to the care team
 - Implemented in 2010
- •Increased Access and Quality of Care to Veterans
 - Increase interdisciplinary team satisfaction, facility leadership acceptance, improved clinical outcomes, & cost-effectiveness
 - Increased Use of Virtual Care Modalities
 - Telephone, clinical video, telehealth, etc.
- •Unburdened Prescribers
 - Offloaded CMM visits & reduced revisit rates

Transitions of Care Pharmacists & Substance Use Disorder ²

- •VA Pharmacist-Led SUD Transitions of Care Telephone Clinic
 - Extended-release naltrexone prescribing
 - Post-discharge appointment coordination
 - Additional service referrals
- Improved Medication Treatment for Opioid Use Disorder & Alcohol Use Disorder (MOUD/MAUD) Prescribing & Retention
 - Reduced substance use
 - Improved quality of life (QoL)
 - Reduced mortality

Table 3Categorization of pharmacist interventions.

Pharmacist intervention	Nui
Scheduled injection	20
Prescribed or prompted MOUD/MAUD order	19
Recommended or ordered labs/urine drug screen	15
Coordinated scheduling of mental health or primary care appointment	12
Refilled non-MOUD/MAUD medication or provided dose recommendation to other provider	7
Placed specialty clinic referral	4
Referred to addiction treatment services	3
Rescheduled post-discharge appointment	3
Coordinated MOUD/MAUD with outside facility	3
Updated administrative details (address, contact information, etc.)	3
Provided naloxone kit	1

Engagement during & after hospitalization improves treatment participation



Cost Reduction

Early Interventions with LAI Administration ³

Reduced Total Costs (18 months): psychiatric hospitalizations, all emergency department (ED) visits, all day clinic visits, and all outpatient visits

Reduced psychiatric hospitalizations

Maintained number of outpatient visits

Patient engagement was not hampered

TARIF 2

Cumulative Effects of Alternate Strategies on Associated Health Care Costs (in 2020 US Dollars) Over 18 Months

Subgroup	Health care costs by treatment strategy, mean (SE) ^a			Comparison of health care costs, mean difference (95% CI) ^a	
Cost category	PP-PP	OAP-OAP	OAP-PP	PP-PP (ref: OAP-OAP)	OAP-PP (ref: OAP-OAP)
All patients	(n = 61)	(n=61)	(n=59)		
Psychiatric hospitalizations	716 (347)	3,480 (1,014)	862 (471)	–2,765 (–5,025 to –782)	-2,619 (-4,852 to -412)
Total ^b	1,669 (418)	4,536 (1,014)	1,747 (498)	-2,867 (-5,133 to -750)	-2,789 (-5,115 to -701)
Patients enrolled in United States	(n = 44)	(n=45)	(n = 42)		
Psychiatric hospitalizations	498 (347)	4,222 (1,333)	1,160 (622)	-3,724 (-6,598 to -1,243)	-3,062 (-6,180 to -382)
Total ^b	1,552 (481)	5,454 (1,331)	2,266 (642)	-3,903 (-6,881 to -1,235)	-3,189 (-6,338 to -648)
Patients with <6 months of prior antipsychotic use	(n = 27)	(n = 28)	(n=30)		
Psychiatric hospitalizations	1,210 (885)	5,097 (2,222)	543 (491)	-3,887 (-9,283 to -241)	-4,554 (-10,027 to -1,216)
Total ^b	2,347 (1,108)	5,758 (2,240)	1,423 (572)	-3,411 (-9,043 to -841)	-4,335 (-9,915 to -941)
Patients with ≥6 months of prior antipsychotic use	(n=30)	(n=30)	(n=29)		
Psychiatric hospitalizations	266 (313)	2,172 (1,250)	1,196 (866)	-1,907 (-4,973 to 254)	-976 (-4,137 to 2,119)
Total ^b	1,402 (499)	2,833 (1,249)	2,075 (906)	-1,430 (-4,605 to 959)	-758 (-3,916 to 2,342)
0.14: 1:					

Bold indicates that 95% CI does not include zero.

^aData are presented as the per-patient mean in 2020 United States dollars.

^aTotal costs represents all costs associated with psychiatric hospitalizations, psychiatric and nonpsychiatric emergency department visits, psychiatric and nonpsychiatric day clinic visits, and all outpatient visits.

OAP=oral antipsychotic; PP=paliperidone palmitate; ref=reference.

Cumulative Effects of Treatment Strategies on Health Care Resource Utilization Psychiatric hospitalizations Total outpatient visits **Total ED visits** All patients OAP-PP vs OAP-OAP PP-PP vs OAP-OAP Patients enrolled in the **United States** OAP-PP vs OAP-OAP PP-PP vs OAP-OAP Patients with < 6 months of prior antipsychotic use OAP-PP vs OAP-OAP PP-PP vs OAP-OAP Patients with ≥6 months of prior antipsychotic use OAP-PP vs OAP-OAP PP-PP vs OAP-OAP -1.0 -0.5 -0.5 1.0 -2.0 -1.0 0 Difference in per-patient mean Difference in per-patient mean Difference in per-patient mea Favors OAP-PP or PP-PP Favors OAP-PP or PP-PP Favors OAP-PP or PP-PP

Forest plots represent the differences in per-patient mean values for the comparison of the OAP-PP and PP-PP treatment strategies relative to OAP-OAP. Error are 95% CIs. Total ED visits include psychiatric and nonpsychiatric ED visits.

ED=emergency department; OAP=oral antipsychotic; PP=paliperidone palmitate.

ExactCare Medication Care Management (MCM) Model (2021) 4

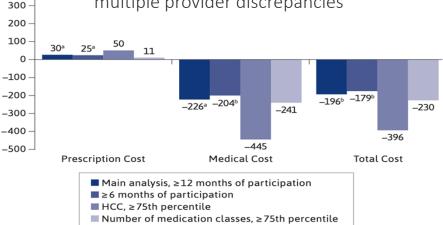
Comprehensive, High-Touch MCM Model

500

400

Change in PMPM Cost in 2019 USD

- Adherence, health care resource utilization (HCRU), & cost of care (CoC) interventions
- Reduced complications with polypharmacy, complex regimens, barriers to access, & multiple provider discrepancies



Pharmacy Team Interventions

- Initial home visit to conduct CMM, assess home situation, and provide patient education
- Prepares and sends all medications

High-Touch Technology

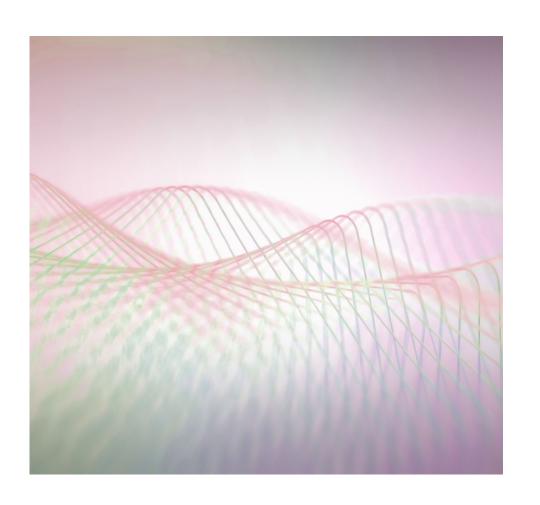
- Mobile app & web portal to track & assess patient usage
- Issued reminders by phone, text message, or mobile app

Total COC
Reductions ~ \$2,400
per member per year

- 5%-point reduction in per month costs
- Decreased total, non-prescription, hospital inpatient, & skilled nursing facility (SNF) costs
- Increased drug prescription costs

Enhanced Effect for Increased Illness Burden

• May be greater for patients with greater comorbidities vs. those with higher medication counts



Innovative Models For The Future



Acute Care

Gaps in Psychiatric Emergency Department Services 5,6

- ED behavioral health patient (BHP) boarding is still a steadfast, nationwide issue (2022)
- Benefits of ED Pharmacists for Non-Psychiatric Patients
 - Reduced adverse drug reactions (ADRs), improved therapeutic selections, & decreased overall drug costs
- 40-65% of BHPs with prolonged ED boarding → <u>significant delays in treatment initiation</u>
 - ED providers may defer psychotropic medication reconciliations to ED behavioral consult team, delaying medication continuation
 - Pharmacist-Driven vs. Provider-Driven ED Medication Reconciliation Process in Rural Academic Medical Center (1 month)
 - Eligible patients → chart notes from mental health services, psychology services, or local psychiatric facility

Increased provider appreciation, workflow efficacy, & patient care

Substance Use Disorder & Addiction Triage Teams 7

Inpatient Addiction Triage Team CPPs

- Dedicated clinical pharmacy practitioner (CPP) on addiction consult team
- Feasible \rightarrow required limited resources for implementation

Implementation Strategies

- Workflow meetings scheduled to adjust consults for CPP inclusion
- Electronic medical record (EMR) template developed for CPP consult recommendations
- Verbal education provided to team providers on new CPP role

Results

- Improved Medication Initiation Rates
- Improved access & patient education
- Used medications for alcohol and opioid use disorder
- Improved treatment initiation time & prescribing <u>before</u> discharge
- Improved medication possession ratio (MPR)
- Decreased ED & hospital readmission rates

Enhanced Provider Services & Improved Patient Access

TABLE 2: Initiation rates of medications for AUD/medications for OUD in patients not actively on treatment at admission

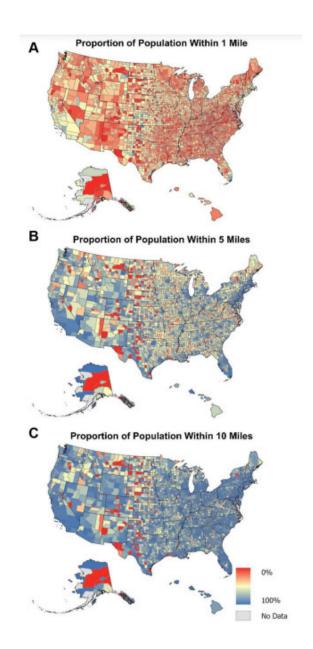
End Point	Historical Control Group, $n = 136^a$	Clinical Pharmacist Practitioner Intervention Group, $n=114^a$	P Value
Initiation rates, No. (%)	10 (7.4)	30 (26.3)	.0001

^aNo. for Table 2 excludes patients on medications for AUD and/or medications for OUD prior to admission.



Community Care

90% of Americans live within 5 miles of a pharmacy 8



Patient Care Activities by Community Pharmacists in a Capitation Funding Model Mental Health and Addiction Program ⁹

- Bloom Program Nova Scotia, Canada
 - Centered around one-on-one care with the **community** pharmacist
 - No waitlist, no cost to patient (covered by the government)
 - Pharmacist advocates and provides information regarding:
 - Community resources
 - Assistance in navigating the mental health and addictions system
 - Medication Management
- Time Involved
 - Initial meeting had median duration of 142 minutes
 - Average follow-up encounter time of 15 minutes

Physician-Delegated Unobserved Induction With Buprenorphine in Pharmacies ¹⁰

- Patients with a history of opioid use disorder, who were interested in receiving buprenorphine and 18 years or older, were recruited by self-referral, emergency department screening, or community outreach.
- Pharmacists assessed patient histories and withdrawal symptoms on the Clinical Opiate Withdrawal Scale, then confirmed a buprenorphine regimen with the collaborating physician.
- Patients were randomly assigned in a 1:1 ratio to pharmacy-based or usual provider-based (DATA-waivered prescriber or opioid treatment program³) follow-up care for 3 months.
- 6 community pharmacies provided the service, 3 were geographically remote pharmacies.
- Retention (one-month post-randomization) was achieved in 25 (89%) receiving pharmacy-based care compared to 5 (17%) assigned to usual care.

Methadone, Future Possibilities?

- Drive time to Opioid Treatment Program ¹¹
 - 20.4 minutes to opioid treatment programs and 4.5 minutes to pharmacies
- Regulations
 - Must be accredited
 - Must adhere to standards of care and be certified
 - Office or Pharmacy based care not generally permitted
- Pharmacy-based model vs OTP-based model
 - Decreases drive time and distance.
 - Decreases costs for US residents.
- Review of office-based methadone treatment studies in stable patients¹²
 - Similar retention, drug use outcomes as opioid treatment programs
 - Patients reported enhanced quality of life, more satisfied with care

Office-based methadone treatment and pharmacy dispensing could enhance access to methadone treatment

Summary

- Pharmacists have been shown to increase positive outcomes and reduce costs by utilizing Comprehensive Medication Management and Technological Innovations.
- New innovative models are expanding the pharmacist's role further in acute and community settings, resulting in improved access and management for behavioral health care services.

Acknowledgements

- Peyton Beck, UTEP PharmD Candidate 2023
- Jessica Hargett, UTEP PharmD Candidate 2023
- Jasmeen Silvestre, UTEP PharmD Candidate 2025

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