



CASE STUDY

Substantial Outcomes Through Incremental Integration

How PASS saved \$264K and helped 72% of patients achieve depression response in just six months

Payers and providers have observed a growing increase in health care costs as well as a widening gap in access to specialty behavioral health (BH) services. Care models that effectively integrate behavioral health into traditional physical care settings remove barriers to behavioral health while bolstering annual cost savings. These integration models are especially effective when leveraging scalable technologies.

Strong comorbidities exist between physical health and behavioral health conditions, resulting in increased medical spending as high as 40-80% more for those chronic pain patients with BH conditions compared to those without². This case study highlights the cost-savings and efficiencies of tech-enabled BH services delivered by a multi-site organization specializing in chronic pain management.



Half of all people with chronic pain also have depression and/or anxiety¹.

The Challenge: Behavioral Health Conditions and Chronic Pain Go Hand in Hand

[Pain and Spine Specialists \(PASS\)](#), a multisite organization specializing in chronic pain management, identified these trends within its patient population, uncovering that 50% of the population met the criteria for a BH disorder. Leadership at PASS knew they would have to address patients' behavioral health at scale to drive optimal clinical results. They also noticed the ineffectiveness of traditional identification and referral methods, with more than 90% of their patients never completing a referral to a BH specialist. The strong correlation between comorbidities and high cost of care, combined with lack of access for mental health services led PASS leaders to deploy a comprehensive solution to address these complicated challenges.

The Solution: Streamlining Screening, Identification, and Support with Technology

Addressing behavioral health begins with effectively identifying the unique needs of a patient population. However, doing so can be particularly challenging in a pain management setting given the overlapping symptomatology of depression and pain: changes in mood, difficulty sleeping, and fatigue. Constrained by a limited and highly manual behavioral health infrastructure, PASS's initial attempts to address patients' BH needs required complex processes to compile the necessary information and make data-informed treatment decisions for their patient population.

To efficiently screen the population in order to build a foundation for integrated behavioral health, PASS implemented [NeuroFlow](#), a technology-enabled behavioral health solution in 2019. PASS used a universal patient deployment model, introducing NeuroFlow to all patients during their monthly encounter. By leveraging the relationship between patient and provider to ensure a foundation of trust in utilizing new technology, PASS was able to maximize enrollment, allowing for data-driven insights based on the needs and severity of their population.

“With NeuroFlow, we realized that not only can we have patient’s mental health data readily accessible, but then we can risk-stratify our population and better understand our patients’ varying risk levels, which allows us to proactively adjust treatment plans where necessary.”

**PASS Pain Management Specialist
Sudhir Rao, M.D.**

Armed with a new approach to patient screening, PASS efficiently determined which patients required behavioral health support, including immediate crisis response. As a result of the implementation, PASS saw 80% assessment compliance from registered users within 30 days, with 50% of patients reaching symptom response (50% reduction in PHQ-9 score in 4-8 months) with statistical significance in 29 weeks. Additionally, exorbitant costs are associated with mental health crisis stabilization in emergency departments (ED). By facilitating responses to a patient generated crisis logged via the NeuroFlow mobile app, PASS was further able to intervene, support, and divert patients who may have otherwise presented to the ED as a result of suicidal ideation.

Advanced Support through Collaborative Care

In the two years that followed their initial investment into behavioral health integration, PASS made significant advances in identifying BH needs, proactively intervening, and averting potential crises. However, PASS continued to see challenges in providing resources and support to patients needing more comprehensive services.

To address this treatment deficit, PASS deepened its commitment to identifying and supporting patients with behavioral health conditions. In early 2021, the organization adopted the [Psychiatric Collaborative Care Model \(CoCM\)](#), utilizing patient data to

determine the appropriate level of care for each PASS patient and leveraging a dedicated Behavioral Health Care Manager (BHCM) and psychiatric consultant support to guide patients with BH needs through their treatment journey.

CoCM enables a more holistic approach to treating common mental health conditions by integrating behavioral health professionals into a patient-centered care team. Developed by the [AIMS Center at the University of Washington](#), and validated as an evidence-based treatment, CoCM is a clinically effective integrated care modality for the treatment of BH disorders³.

Thanks to gathering baseline data over the previous two years, PASS was able to determine the appropriate services to meet their population's behavioral health needs, including the immediate identification of patients appropriate for CoCM - alleviating the initial ramp-up costs commonly associated with the model. Now that the organization has a proper registry with the appropriate technology and staffing in place, PASS and its clinics are equipped to deliver an enhanced level of integrated care.

Results: Delivering High-Tech, High-Touch Care

Through tiered offerings that provide an augmented level of integrated care, PASS accomplished its goal of offering the right solution to the right patients at the right time. By enhancing the technology offering with a dedicated BHCM, PASS helped patients reach depression response faster; 72% (+/- 3.5% at 95% CI) of patients reached response in 6 months, compared with 52% in traditional CoCM programs⁴.

In addition, PASS has achieved cost savings through a combination of more efficient staffing, crisis

intervention, and concurrent treatment of pain and BH disorders. BHCM's were able to quickly and efficiently fill their CoCM caseloads, alleviating the financial imbalance of staffing costs to service reimbursement ratio while caseloads were being built. Additionally, by offering multiple levels of care within the same practice, PASS ensured that all patients had access to a combination of high-tech, high-touch offerings based on their level of BH need. As a result, PASS identified 567 patients who may have been experiencing crises that were flagged by NeuroFlow's technology. While only 143 of these patients were enrolled in CoCM, this multi-tiered offering allowed immediate intervention for any patient experiencing a crisis.



143 ENROLLED IN CoCM



72% OF PATIENTS REACHING RESPONSE



\$264K SAVINGS

Finally, industry statistics published by Milliman indicate that 9-17% of cost savings can be attributed to effective integration of physical and mental health programs, specifically evidence-based CoCM programs². Per Milliman's review, cost savings associated with concurrent treatment of pain-related comorbidities and mental health is \$1,850 per patient, realized annually and adjusted for 2022. For PASS, this equates to \$264,700 in annualized cost savings in just one year. PASS realized these financial results based on the 143 patients enrolled in the first 6 months of the program. As the tried-and-true gold standard for holistic care, CoCM will continue to provide numerous opportunities for PASS to deliver an innovative, holistic approach to patient care.

CITATIONS

1. <https://www.practicalpainmanagement.com/patient/conditions/chronic-pain-mental-health-guide>
2. <https://www.milliman.com/en/insight/potential-economic-impact-of-integrated-medical-behavioral-healthcare-updated-projections>
3. <https://aims.uw.edu/collaborative-care/evidence-base-cocm>
4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3513702/>



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