Keywords
behavioral health equity; urban health; social determinants of health; treatment engagement; patient activation; collaborative care; implementation science; health economics; system change

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Received: 17-06-2026
Revised:25-07-2026
Accepted:03-08-2026
Doi:10.1922/ejprd.v34i7s.1767

European Journal of Prosthodontics and Restorative Dentistry (2026) 34,7(s) 1166–1177

Behavioral Health Equity In High-Disparity Urban Communities: Public Health Impact, National Scalability, And Clinical Practice Implications

Abstract
Behavioral health disparities within high-disparity communities are often discussed as service gaps to be filled – a lack of clinics, clinicians, and programs. This paper makes a different argument: behavioral health disparities are manifestations of complex system failures around coverage, housing, digital, workforce, and financing that are communicated to individuals through known psychological mechanisms AND can ONLY be solved at scale through clinical and public health system change. Here we combine a critical review with STROBE-informed cross sectional demonstration using an openly reproducible dataset showing that unstable housing predicted elevated depression symptoms (PHQ-9: 10.76 vs. 7.69; $t638 = 9.91$, $p < .001$, $d = 0.83$); insurance type predicted dramatically different engagement levels (56.0% vs. 32.2% uninsured; chi-square(2) = 22.17, $p < .001$); and within adjusted models private insurance (OR = 2.54), digital access (OR = 1.62), and housing status (unstable OR = 0.53) predicted behavioral health engagement while depression severity barely did (OR = 1.05)—the hallmark of barriers to opportunity rather than motivation driving healthcare seeking behaviors. Drawing on this evidence base we present the From Service Gaps to System Change framework and discuss how it advances – and differs from – determinant frameworks (CFIR), process frameworks (EPIS), and evaluation frameworks (RE-AIM) as a content-focused, mechanism-driven equity framework, and formally introduce three hypotheses on mediation by housing, moderation by digital access, and independence by financing. Limiting beliefs, health economic considerations, clinical implications, and policy recommendations are discussed.

Introduction

Populations most affected by mental illness and substance use disorders are those who have the least reliable access to care. Disparity neighborhoods - urban communities disproportionately composed of poor, unhoused, underinsured, and historically racialized populations - experience the behavioral health burden of the United States most heavily and receive care least reliably. Over fifty percent of adults who self-report fair or poor mental health status say they received services in the past year, but this is true for White adults much more often than Black or Hispanic adults (50% vs. 39% and 36%, respectively; Kaiser Family Foundation [KFF], 20FY2024b). National surveys reveal that these disparities endure over time, and despite similar rates of disorder prevalence across populations (Cook et al., 2017; Kessler et al., 2005; McGuire & Miranda, 2008; Substance Abuse and Mental Health Services Administration [SAMHSA], 20FY2023). They are also stupefyingly expensive: just major depressive disorder represents over $300 billion in societal costs annually, most of which is accrued outside the behavioral health treatment system (Greenberg et al., 20FY2021).

Many decades and billions of dollars of federal and institutional investment later, gaps in access and clinical outcomes persist. The typical policy solution to each new report of this fact has been to call them gaps, and fund services to fill them. This cycle creates more clinics to build, more grants to write, more programs to launch. This review starts from the position that it is this characterization that is faulty. There are not gaps in care: there are patterns of adversity that make receiving mental health care how it does. The policies we have designed and implemented have failed to ameliorate them not because there have been too few of them, but because they have targeted the pieces that produce disparities independently of one another. Inequities are created by the ways that multiple system features interact; they will not go away if we change one lever without changing the others (Braithwaite et al., 2018). Features of the behavioral health system do not influence access and outcomes from afar: they affect individuals. Cognitive and emotional responses to system barriers mediate patients' relationship with treatment seeking, service use, and intervention efficacy; people make the choice of whether or not to use care when it is available to them, and that decision is grounded in how the structure of our mental health care makes them think and feel. To redesign it to work equitably will therefore require explanation both of which interventions can alter that psychology, and how. It will not be enough to identify where gaps are if they will simply reappear between new points on the map. The question we aim to organize research around with this review is therefore how we can move from identifying gaps in care to restructuring the US behavioral health system to work equitably, well, and at scale.

We focus this review on three guiding questions. What does current evidence - including the major points of tension between studies - tell us about the systemic factors and behavioral mechanisms that cause urban mental health care to be inequitable (Research Question 1; RQ1)? How might these drivers of the equity-gap emerge at the analytic level when measuring a community sample (RQ2)? And, given what we know now, what framework, hypotheses, and policy levers might help move us from understanding these drivers to implementing system improvements at the national level that can address them (RQ3)?

2. Literature Review and Conceptual Framework

2.1 Systemic determinants of urban behavioral health inequity

Four lines of evidence point to the systemic account. Access coverage: Adults without insurance or with public insurance initiate and complete care at substantially lower rates compared to their privately insured counterparts, and efforts to improve initiation among racial-ethnic minority adults are most effective when they fundamentally alter the care experience instead of simply educating the consumer (Lee-Tauler et al., 2018; Medicaid and CHIP Payment and Access Commission also reach similar findings regarding public insurance). Access housing: Instability (e.g., eviction, doubling up, severe cost burden) has strong links to depression/anxiety and decreased service use among those with greatest need (Kim et al., 2022; Office of Disease Prevention and Health Promotion [ODPHP], n. d.). Access digital infrastructure: The shift toward telehealth-based delivery means that unequal broadband and device access turns clinical innovation into another channel for disparities. National surveys show that Black and Asian Americans are far less likely to use virtual care than other populations, at a time when total need is increasing (Zhou et al., 2025). Structural/organizational factors: The misdistribution of the workforce, financing that does not reward coordination, and services that are not culturally attuned to the communities they serve all work together to limit engagement among those who otherwise would have access (Alegria et al., 2016, 2018). As you can see, these factors aren't separate annoyances. They work together (Braithwaite et al., 2018). That's why we need a systems lens.

2.2 Psychological mechanisms: How structure reaches behavior

Structural frameworks can describe behavior but not explain or modify it. Five mechanism literatures fill in psychology. First, demand: seeking help itself is behavior, and Andersen's (1995) classic behavioral model of health services use unpacks predisposing, enabling, and need factors that influence use; fifty years of demand-side literature, reflected in studies reviewed below, has concluded that enabling factors (coverage, transportation, internet access) drive service use rather than need in disadvantaged contexts - that is, patients do not engage because they are "sufficiently symptomatic." Second, COM-B: capability, opportunity, and motivation must all be present for a behavior to occur, and lack of opportunity due to structural exclusion cannot be compensated for with motivational strategies (Michie et al., 2011). Third, activation: patients' knowledge, skill, and confidence to manage their own health care (i.e., activation) is understandably low when facing material instability and unfamiliar systems, predicts patients' engagement and outcomes, and is built through care manager assistance with illness management in collaborative care

(interventions); psychologically, such assistance provides activation from outside the patient, rather than relying on patients to initially generate it themselves (Hibbard et al., 2004). Fourth, trust: the therapeutic alliance is one of the most consistent predictors of psychotherapy outcome (average r = .28 across 32,614 patients; Fluckiger et al., 2018), but a patient cannot form an alliance with a provider before entering care, institutional mistrust due to past discrimination (either experienced personally or sampled within a racial group; KFF, 2024b; LaVeist et al., 2009) independently predicts care underutilization, and that mistrust cannot be bolstered through alliance-building once within care. Conversely, both culturally adapted care and community-partnered care - which staff programs based on the community's desires rather than provider organizations' - successfully engage patients by tackling this mechanism (Miranda et al., 2005; Wells et al., 2013). Fifth, continuation: approximately 20% of patients receiving psychotherapy will disengage and not return, and Black patients and young patients are more likely to do so (Swift & Greenberg, 2012); patients therefore not only need to initiate care but continue receiving care over time, a longitudinal behavior that is actively supported or abandoned in standard care depending on the use of follow-up contact (versus saying "see you next time"), outcome tracking, and modality flexibility. Recent emphasis on trauma-informed care ties these mechanisms together at the organizational level by prioritizing safety and trust as requirements for patient engagement (SAMHSA, 2014). Our framework from Section 2.5 elucidates these mechanisms rather than leaving them implicit.

2.3 Evidence that system redesign reduces disparities - including its economics

The systemic account would amount to little more than diagnosis without proof that redesign is effective. Proof exists. It’s strongest where redesign has been most extensive. Across multiple outcomes, collaborative care improved late-life depression in the seminal IMPACT trial (Unutzer et al., 2002), and matched expectations for Black and Latino patients-who, under the model, were significantly more likely to receive antidepressant treatment (64% vs. 45%) and psychotherapy (37% vs. 13%) relative to usual care (Arean et al., 2005); Across 30-plus trials, the Community Guide finds meta-analytic evidence of collaborative care’s consistent effectiveness across populations and settings (Thota et al., 2012), and new evidence that disparities decrease when managed collaboratively in routine practice (Angstman et al., 2015), while meta-narrative analysis extends these findings and the collaborative chronic care model across primary care, specialty care, and behavioral health settings specifically (Woltmann et al., 2012; Archer et al., 2012). Preliminary evidence of the economic case holds as well: synthesizing economic studies, the Community Guide determined collaborative care to be a good value, with the majority of cost-utility analyses falling below standard willingness-to-pay thresholds (Jacob et al., 2012). At what may be considered platform scale, Certified Community Behavioral Health Clinics (CCBHCs)-community-based organizations funded through prospective payment now serving an estimated 3 million Americans-have shown that financing innovation can transform community behavioral health at scale, with national evaluation finding CCBHCs improve access, crisis capacity, and care coordination (Brown et al., 2022; Mauri et al., 2024; National Council for Mental Wellbeing, 2024; SAMHSA, 20 24), and 988 providing population-level linkage to care (FCC, 20 24; KFF, 20 24a).

2.4 Counterevidence and unresolved controversies

A balanced synthesis disappoints as often as it excites. Where the redesign story strains are four. First, implementation fragility: architectures that work in trials often fail when implemented routinely – in a nationwide VA stepped-wedge trial of an efficacious telemedicine collaborative care model, eligible patients-initiated trauma-focused psychotherapy at a rate of 6.0%, and an intensified implementation condition did no better than usual implementation (Fortney et al., 2015, 2022). Good efficacy does not implement itself; internal setting readiness and implementation facilitation decide if it lives past contact with everyday care. Second, cost realism: despite promising overall evidence on economic effects (Jacob et al., 2012), integration costs money, not less money – VA national primary care-mental health integration raised total costs by about $9% per patient per year while improving access (Leung et al., 2019), and one telemedicine iteration appears to have conferred trivial quality-adjusted life-year improvements at close to $2,029 per patient per year (Painter et al., 2017). Equity impacts must thus be funded rather than expected to pay for themselves. Third, telehealth ambivalence: just as telehealth connects to those who can already get connected, it may increase disparities for those who lack connectivity (Zhou et al., 20). Telehealth without internet provisioning is robbery, not redistribution. Fourth, platform unevenness: CCBHC rollout differs meaningfully across implementing organizations, with providers across these organizations continuing to report ease with linkage to education and employment but struggling with consistent linkage to housing and transportation – that is, with the social assets the model intends to help integrate (Olgac et al., 20) – while state-level uptake is uneven (Mauri et al., 20). Trauma-informed organizational intervention, finally, has not yet built extensive evidence of reliable clinical outcomes (Huo et al., 20). None of this is grounds for giving up on system redesign; all of it should shape how we approach it. Section 5 will revisit these four areas of concern.

2.5 The From Service Gaps to System Change framework: Position, differentiation, and propositions

Implementation science consists of determinant frameworks describing what affects implementation (the revised Consolidated Framework for Implementation Research [CFIR]; Damschroder et al., 2022); process models describing when or sequencing it over time (Exploration-Preparation-Implementation-Sustainment [EPIS]; Aarons et al., 2011); and evaluation frameworks describing how to judge it (RE-AIM; Glasgow et al., 1999; taxonomy according to Nilsen, 2015). Each are intentionally content-neutral: they can be used to implement anything, and therefore say nothing about what ought to be implemented. The “From Service Gaps to

System Change" framework (Figure 1) fills this fourth quadrant: it is content-specific and mechanism-explicit, with a focus on equity. Explicitly so: its contribution is three-fold and stated plainly. First, content: what to implement. This framework specifies the structural determinants whose change the equity evidence demands: coverage, housing linkage, digital provisioning, financing architecture, and organizational culture. Second, mechanism: how they work. The framework pairs each structural determinant with the psychological mechanism (Section 2.2) through which it is expected to impact engagement behavior: coverage and digital access as Andersen's enabling factors and COM-B opportunity; care management as externally regulated activation; community partnership and trauma-informed care as interpersonal trust/ therapeutic alliance enablement; and measurement-based care as adherence retention support. Third, sequence and feedback. This framework orders those levers into six stages arranged into a control loop: identification of inequities → needs analysis → integrated clinical & public health intervention → community-engaged implementation → systems transformation & scale-up → continuous RE- AIM-informed monitoring. CFIR, EPIS, and RE- AIM can now each find a home inside the framework as tools, not rivals to it. Let the framework still be a theory-driven heuristic to be tested. Pending that validation - and to make it possible rather than hollow - the framework is translated here into three testable propositions.

Proposition 1 (structural mediation): Housing insecurity mediates the relationship between poverty and both symptom burden and treatment engagement. Including housing instability in the model for observed associations between income and wellbeing reduces coefficient estimates toward zero. Proposition 2 (digital moderation): Digital inclusion moderates the relationship between service configuration and engagement. Accountable telehealth-enabled care models will increase engagement disproportionately more among the digitally included unless efforts are made to provision devices, broadband internet, and telephone-first options to un-equipped populations. Proposition 3 (financing independence): Expanded coverage and/or prospective payment increases engagement independently of symptom severity, suggesting that engagement disparities are constrained by opportunity rather than medical need or treatment motivation. Each proposition can be tested with observational data using mediation/moderation analyses or mixed ("hybrid") effectiveness-implementation studies (Curran et al., 2012). The analysis below demonstrates the measurement and modeling framework such research would entail - complete with suggestive, convergent evidence for all three hypotheses from a single dataset.

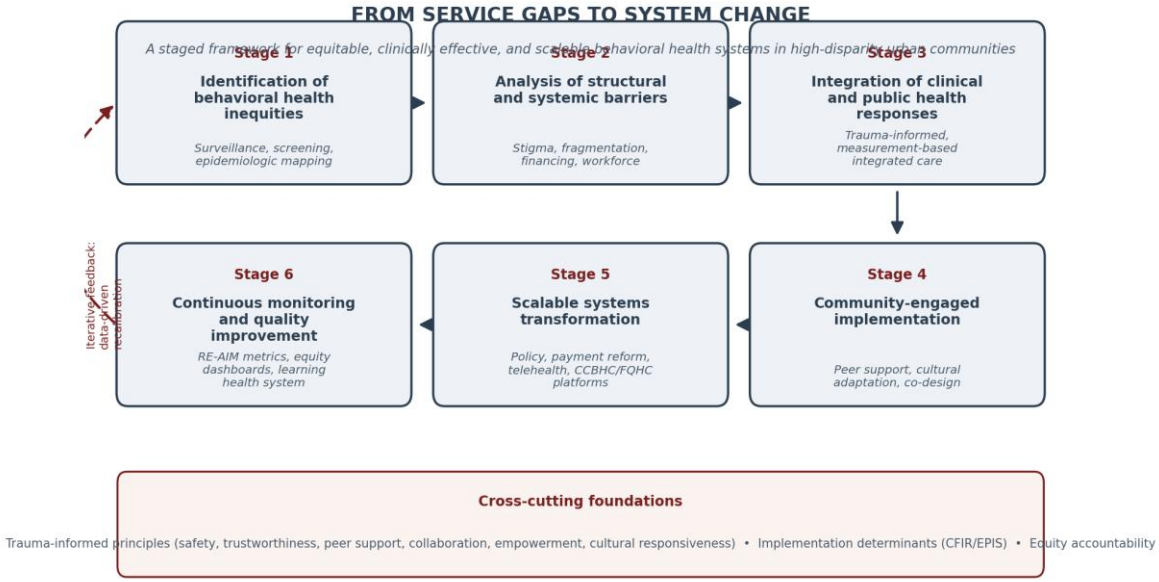

Figure 1. The From Service Gaps to System Change framework: a six-stage, feedback-governed, content-specific and mechanism-explicit equity model for behavioral health systems in high-disparity urban communities. Determinant specification uses CFIR, phasing uses EPIS, and monitoring uses RE-AIM as instruments within the framework. CFIR = Consolidated Framework for Implementation Research; EPIS = Exploration-Preparation-Implementation-Sustainment; CCBHC = Certified Community Behavioral Health Clinic; FQHC = Federally Qualified Health Center.

3. Method

3.1 Design and transparency statement

This article juxtaposes two parts. Part A summarizes peer-reviewed (reports of) research and federal surveillance (years 20 21 - 20 26 unless a key milestone study is outside that window); see Baethge et al. (2019) for details on how this was searched (PubMed /MEDLINE, PsycINFO, Scopus) and synthesized per SANRA guidance. We combined intake terms (urban, underserved, low income, minority) with outcome terms (mental health, depression, anxiety, substance use), mechanism terms (engagement, activation, alliance, help-seeking, adherence, trust), and system terms (disparities, access, integrated or collaborative care, implementation,

telehealth, housing, insurance, cost-effectiveness). We did not conduct a systematic review with PRISMA accounting because our purpose here is theory-building; thus, there is no study- flow log or formal risk-of-bias grading, and this limitation carries through to the Limitations. Part B is an analytic cross-sectional demonstration peer-edited against relevant STROBE items (von Elm et al., 2007).

3.2 Synthetic data source and sample

The sample (N = 640) is a synthetic adult population sample from an otherwise hypothetical high-disparity urban area. Variable distributions and their covariance structure were drawn using parameter values that fell within realistic ranges identified in the literature cited in Section 2 -(high uninsurance and public coverage rates, about one third of families being unstably housed, digitally excluded racial minorities, differences in engagement associated with coverage status, etc.) (KFF, 2024b; Kim et al., 2022; Lee-Tauler et al., 2018; SAMHSA, 2023; Zhou et al., 2025).

3.3 Measures

Sociodemographic characteristics included age, sex, race and ethnicity, education, employment status, household income bracket, insurance status (none/uninsured vs. public insurance vs. private insurance), stable vs. unstable housing, and access to reliable broadband internet or smartphone data plan. Depressive symptoms were measured on a 0-27 score of the Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001) and anxiety symptoms were measured on a 0-21 score of the Generalized Anxiety Disorder-7 scale (GAD-7; Spitzer et al., 2006). Scores of 10 or greater on these instruments indicate the presence of moderate or greater depressive or anxiety symptoms, respectively. Social support was measured on a 1-7 mean-item score of the Multidimensional Scale of Perceived Social Support (Zimet et al., 19 88). Covariates included number of lifetime traumas experienced, any hazardous substance use (yes/no), engagement with any behavioral health treatment in the past year (yes/no), number of ED visits in the past year, and self-reported quality of life on a 0-100 scale.

3.4 Statistical analysis

Analyses flowed from description to inference. Frequencies and measures of central tendency and variability were calculated along with the 95% confidence interval (CI) of the mean for depressive severity. Comparison of PHQ-9 scores by housing stability was made with an independent- samples t test (with Levene's test of equality of variances) reporting Cohen's d and 95% CI of the mean difference; chi-square tests with Cramer's V were used to assess engagement by insurance type and housing stability; differences in quality of life across tertiles of income were made with one-way analysis of variance (ANOVA), followed by Tukey if significant omnibus test, reporting eta-squared. Pearson correlations were used to describe continuous associations. Multiple linear regression modeled quality of life as a function of depressive severity, social support, housing instability, insurance status, age, and sex reporting unstandardized and standardized coefficients with 95% CIs, R-squared, and assumption tests (variance inflation factors, Shapiro-Wilk test on the residuals, Breusch-Pagan) with heteroskedasticity-consistent (HC3) standard errors as sensitivity. Binary logistic regression modeled past year engagement reporting odds ratios (ORs) with 95% CI, the omnibus likelihood- ratio test, Nagelkerke R-squared, and area under the receiver operating characteristic curve (AUC); sensitivity to covariate inclusion was assessed by refitting the model without symptom severity and examining the stability of structural coefficients. This bears directly on Proposition 3. No paired data were collected, so paired tests were not conducted. Two-tailed alpha was set to .05. All analyses were conducted in Python 3 with NumPy, SciPy, and statsmodels.

3.5 Ethical considerations

Synthetic data describing no real individuals, IRB review was waived. Data synthesis drew upon only published data. Labeling synthetic data in all exhibits where used, and providing a complete description of the model that generated the synthetic data here within the document, follows current best practices for presenting illustrative datasets.

4. Results

4.1 Sample characteristics

Demographic characteristics of the SYNCS cohort sample (N = 640) are described in Table 1. Participants had a mean age of 42.9 years (SD = 13.9), 53.6% were female, and 44.7% were Black, 31.7% Hispanic, 14.2% White, and 9.4% another race/ethnicity. Almost half (48.4%) reported an annual household income below $25,000, 18.4% were uninsured and 51.4% publicly insured, 33.8% reported unstable housing, and 76.6% had dependable digital access. Mean depressive symptoms were mild-to-moderate severity (PHQ-9 M = 8.73, SD = 3.98, 95% CI [8.42, 9.04]); 42.0% scored in the moderate or higher range, 16.4% had at least moderate anxiety symptoms (GAD-7 M = 6.48, SD = 3.34), and 32.5% screened positive for hazardous substance use. Despite indicative symptomology, only 42.3% reported any engagement in treatment in the past year – qualifying our sample as a high-need, low engagement population.

Table 1
Characteristics of the Synthetic Urban Community Sample (N = 640; Synthetic Illustrative Data)

Characteristic	n (%) or M (SD)	Characteristic (cont.) / value
Age, years, M (SD)	42.9 (13.9)	PHQ-9 depressive severity, M (SD): 8.73 (3.98); >=10: 42.0%
Female sex	343 (53.6)	GAD-7 anxiety severity, M (SD): 6.48 (3.34); >=10: 16.4%
Black	286 (44.7)	Social support (1-7), M (SD): 4.28 (1.20)
Hispanic	203 (31.7)	Trauma exposure count, M (SD): 2.21 (1.51)
White	91 (14.2)	Hazardous substance use: 208 (32.5)
Other race/ethnicity	60 (9.4)	Quality of life (0-100), M (SD): 66.5 (11.6)
Income <$25k	310 (48.4)	ED visits, past year, M (SD): 1.08 (1.17)
Uninsured	118 (18.4)	Past-year treatment engagement: 271 (42.3)
Publicly insured	329 (51.4)	Digital access: 490 (76.6)
Privately insured	193 (30.2)	Unstable housing: 216 (33.8)

Note. All values computed from the synthetic dataset specified in Appendix A. PHQ-9 = Patient Health Questionnaire-9; GAD-7 = Generalized Anxiety Disorder-7; ED = emergency department; M = mean; SD = standard deviation.

4.2 Bivariate analyses

Housing instability was associated with markedly higher depressive severity: residents in unstable housing averaged PHQ-9 = 10.76 (SD = 3.58) versus 7.69 (SD = 3.78) among the stably housed, a difference of 3.08 points (95% CI [2.47, 3.68]); Levene's test indicated homogeneous variances, F = 0.79, p = .374, and the difference was significant with a large effect, t (638) = 9.91, p < .001, d = 0.83. Treatment engagement varied sharply by coverage: 56.0% of privately insured, 38.0% of publicly insured, and 32.2% of uninsured participants reported past-year engagement, chi-square (2, N = 640) = 22.17, p < .001, Cramer's V = .19; engagement was likewise lower under unstable housing (32.9% vs. 47.2%), chi-square (1) = 11.41, p < .001. By contrast - and consistent with Proposition 1 - quality of life did not differ directly across income categories (M = 65.8, 67.4, and 66.5 for the <$25k, $25k-$50k, and >$50k groups), F (2, 637) = 1.15, p = .318, eta-squared = .004, with no significant Tukey contrasts. This null is a finding, not an anomaly: income's influence on wellbeing travels through its correlates - housing, coverage, symptoms - rather than operating as a direct effect, exactly the mediated structure the framework predicts.

Correlational patterns (Table 2) were coherent with the measurement model: depressive and anxiety severity were strongly related (r = .70), and depressive severity correlated negatively with quality of life (r = -.58) and social support (r = -.36) and positively with ED utilization (r = .29) and trauma burden (r = .31); all displayed associations were significant at p < .05, with the smallest reaching only marginal significance (trauma with quality of life, r = -.12).

Table 2 Pearson Correlations Among Continuous Study Variables (N = 640; Synthetic Illustrative Data)

Variable	1	2	3	4	5	6
1. PHQ-9 severity	-					
2. GAD-7 severity	.70	-				
3. Social support	-.36	-.30	-			
4. Quality of life	-.58	-.40	.44	-		
5. ED visits	.29	.21	-.14	-.23	-	
6. Trauma count	.31	.22	-.09	-.12	.07	-

Note. PHQ-9 = Patient Health Questionnaire-9; GAD-7 = Generalized Anxiety Disorder-7; ED = emergency department. Correlations of |r| >= .09 are significant at p < .05.

4.3 Multivariable models

The linear model for quality of life (Table 3) was significant, F (7, 632) = 62.38, p < .001, explaining 40.9% of variance (adjusted R-squared = .402). Depressive severity was the dominant predictor (B = -1.31 per PHQ-9 point, 95% CI [-1.51, -1.11], beta = -.45, p < .001), followed by social support (B = 2.52 per scale point, 95% CI [1.89, 3.14], beta = .26, p < .001) and unstable housing (B = -2.17, 95% CI [-3.76, -0.58], beta = -.09, p = .007).

Uninsurance was not independently associated with quality of life once symptoms and housing were controlled (B = -1.58, p = .137) - converging with the ANOVA null on the mediated structure of Proposition 1. Diagnostics supported the model: all variance inflation factors were at or below 1.35, residuals were consistent with normality (Shapiro-Wilk p = .131) and homoskedasticity (Breusch-Pagan p = .644), and all conclusions were unchanged under HC3 robust standard errors.

Table 3Multiple Linear Regression Predicting Quality of Life (N = 640; Synthetic Illustrative Data)

Predictor	B (SE)	beta	95% CI for B	t	p
Intercept	66.52 (2.18)	-	[62.23, 70.81]	30.44	< .001
PHQ-9 severity	-1.31 (0.10)	-.45	[-1.51, -1.11]	-12.78	< .001
Social support	2.52 (0.32)	.26	[1.89, 3.14]	7.87	< .001
Unstable housing	-2.17 (0.81)	-.09	[-3.76, -0.58]	-2.68	.007
Uninsured (vs. private)	-1.58 (1.06)	-.05	[-3.66, 0.50]	-1.49	.137
Public insurance (vs. private)	0.52 (0.81)	.02	[-1.08, 2.12]	0.63	.527
Age	0.03 (0.03)	.04	[-0.02, 0.08]	1.15	.250
Male sex	0.21 (0.72)	.01	[-1.20, 1.61]	0.29	.774

Note. Model: F (7, 632) = 62.38, p < .001; R-squared = .409, adjusted R-squared = .402. All variance inflation factors <= 1.35; Shapiro-Wilk residual p = .131; Breusch-Pagan p = .644; conclusions unchanged with HC3 robust standard errors. PHQ-9 = Patient Health Questionnaire-9; CI = confidence interval.

The logistic model for past-year treatment engagement (Table 4; Figure 2) was significant overall, likelihood-ratio chi-square (8) = 41.81, p < .001, Nagelkerke R-squared = .085, AUC = .643 - modest discrimination that is itself informative, indicating that engagement in this setting is governed substantially by structural position rather than measured individual differences. Adjusting for all covariates, private insurance was associated with 2.5 times the odds of engagement relative to uninsurance (OR = 2.54, 95% CI [1.55, 4.15], p < .001); digital access with 62% higher odds (OR = 1.62, 95% CI [1.08, 2.41], p = .018); and unstable housing with 47% lower odds (OR = 0.53, 95% CI [0.37, 0.78], p = .001). Symptom severity showed only a marginal positive association (OR = 1.05 per PHQ-9 point, 95% CI [1.00, 1.10], p = .055): need alone barely moved engagement, the Andersen-model signature anticipated in Section 2.2. In the sensitivity model excluding severity, structural coefficients were essentially unchanged (private insurance OR = 2.43; digital access OR = 1.55), the pattern Proposition 3 formalizes: coverage and infrastructure effects are not artifacts of differential need.

Table 4 Binary Logistic Regression Predicting Past-Year Behavioral Health Treatment Engagement (N = 640; Synthetic Illustrative Data)

Predictor	B (SE)	Wald	OR	95% CI for OR	p
Private insurance (vs. uninsured)	0.93 (0.25)	13.83	2.54	[1.55, 4.15]	< .001
Public insurance (vs. uninsured)	0.26 (0.23)	1.25	1.30	[0.82, 2.05]	.264
Digital access	0.48 (0.20)	5.57	1.62	[1.08, 2.41]	.018
PHQ-9 severity	0.05 (0.02)	3.67	1.05	[1.00, 1.10]	.055
Unstable housing	-0.63 (0.19)	10.65	0.53	[0.37, 0.78]	.001
Social support	0.11 (0.08)	1.95	1.11	[0.96, 1.29]	.162
Age	0.00 (0.01)	0.24	1.00	[0.99, 1.01]	.628
Male sex	-0.16 (0.17)	0.92	0.85	[0.61, 1.18]	.337

Note. Model: likelihood-ratio chi-square(8) = 41.81, p < .001; Nagelkerke R-squared = .085; area under the ROC curve = .643. Sensitivity model excluding PHQ-9: private insurance OR = 2.43, digital access OR = 1.55. OR = odds ratio; CI = confidence interval; PHQ-9 = Patient Health Questionnaire-9.

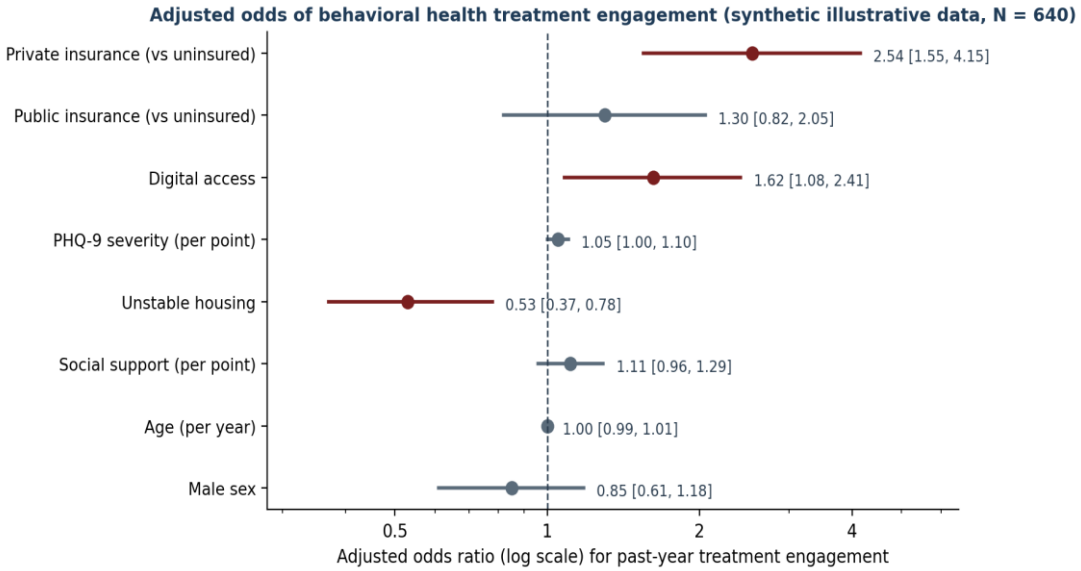

Figure 2. Adjusted odds ratios (log scale) with 95% confidence intervals for past-year behavioral health treatment engagement in the synthetic illustrative sample (N = 640). Darker markers denote p < .05. Structural predictors - coverage, digital access, and housing - dominate individual characteristics.

5. Discussion

5.1 Principal findings and mechanistic interpretation

The demonstration renders the systemic thesis quantitatively concrete, and the mechanisms of Section 2.2 explain why the coefficients take the shape they do. Read as an Andersen (1995) model, the logistic results are unambiguous: enabling factors (coverage OR = 2.54; digital access OR = 1.62; stable housing) dominate need (PHQ-9 OR = 1.05, marginal), the signature of opportunity-constrained rather than motivation-constrained help-seeking (Michie et al., 2011). This resolves an apparent paradox in the linear model - why does insurance improve engagement but not, directly, quality of life? Because the two outcomes sit at different points of the causal chain: coverage operates upstream as an opportunity structure governing entry, whereas quality of life is determined downstream by symptom burden, social support, and housing (R-squared = .41), with insurance influence transmitted through them. The income null (ANOVA and regression alike) completes the mediated picture formalized in Proposition 1. Likewise, why should digital access matter differently across groups? Because it is not a preference variable but an opportunity variable unequally distributed by income and race (Zhou et al., 2025); where provisioning removes the constraint, the coefficient should attenuate - the moderation logic of Proposition 2, directly testable in provisioning trials. And the modest overall discrimination (AUC = .643) is itself the point: when structure governs who gets care, individual-difference models cannot classify engagement well, and only structural intervention can equalize it.

5.2 From service gaps to system change - read against the counterevidence

The framework's credibility rests on absorbing, not evading, the tensions of Section 2.4. Why do collaborative care models fail in some communities despite trial efficacy? The VA stepped-wedge experience locates the answer in inner-setting capacity, competing demands, and facilitation intensity rather than in the model itself (Fortney et al., 2022) - a CFIR diagnosis (Damschroder et al., 2022) implying that Stage 4 of the framework (community-engaged implementation with adequate facilitation) is not optional decoration but the load-bearing wall. Why does integration raise costs even as it improves access (Leung et al., 2019)? Because equity is a purchased good: reaching the previously unreached generates utilization by design, which is precisely why Stage 5 pairs clinical models with financing architecture - prospective payment and collaborative care billing - built to fund reach rather than punish it, within an aggregate economic case that remains favorable (Jacob et al., 2012) but must be engineered model by model (Painter et al., 2017). Why can telehealth widen the very disparities it promises to narrow? Because modality innovation without opportunity provisioning redistributes access toward the connected (Zhou et al., 2025) - hence digital provisioning enters the framework as infrastructure, not amenity. And why do platform models underdeliver on social linkage (Olgac et al., 2025)? Because cross-sector resources - housing above all - lie outside clinic control, which is why the framework treats housing linkage as a system component with dedicated financing rather than a referral aspiration. In each case the counterevidence does not weaken the framework; it specifies it.

5.3 Clinical practice implications

For clinical psychologists, mental health counselors, psychiatrists, and addiction counselors, three implications follow, each mechanism-grounded. Assessment should be structurally and psychologically informed: housing stability, coverage, digital means, activation, and institutional trust belong in intake alongside the PHQ-9 and GAD-7 (Hibbard et al., 2004; Kroenke et al., 2001; Spitzer et al., 2006), because they predict engagement as strongly as symptoms and identify the scaffolding each patient requires. Treatment should run through

engagement-protective architecture: measurement-based collaborative care with proactive outreach counteracts the documented dropout gradient (Swift & Greenberg, 2012); warm handoffs and culturally adapted, community-partnered delivery accelerate the alliance and trust formation on which outcomes depend (Fluckiger et al., 2018; Miranda et al., 2005; Wells et al., 2013); and telephone-first options protect the digitally excluded. Finally, clinicians should treat social needs as clinical events: a positive housing-instability screen warrants navigation with the urgency of a positive depression screen, and hazardous substance use - present in roughly one third of this sample - belongs inside the integrated team, managed concurrently rather than through sequential referral.

5.4 Public health, economics, and national scalability

At population level, the framework's Stage 5 maps onto existing national platforms: CCBHCs as the prospective-payment chassis (Brown et al., 2022; Mauri et al., 2024; SAMHSA, 2024), Federally Qualified Health Centers extending collaborative care into primary care, and the 988 ecosystem as the identification layer (FCC, 2024; KFF, 2024a). The economic argument should be made with discipline rather than enthusiasm. The population burden is enormous and mostly indirect (Greenberg et al., 2021), collaborative care offers good economic value in aggregate (Jacob et al., 2012), and reduced avoidable emergency utilization is a plausible offset channel - in these data, depressive severity correlated with ED visits ($r = .29$) - but integration reliably raises direct costs in the near term (Leung et al., 2019), and individual models can disappoint on cost-effectiveness (Painter et al., 2017). The honest fiscal claim is therefore not that system change pays for itself, but that it purchases measurable equity and population health at defensible cost, and that prospective payment exists precisely to make that purchase sustainable. Scalability requires fidelity to core functions - measurement-based care, proactive follow-up, social-need navigation - with disciplined local adaptation of form; workforce arithmetic that only task-sharing satisfies, extending scarce licensed clinicians through care managers, peer specialists, and community health workers (Thota et al., 2012; Unutzer et al., 2002); and phased, evaluated rollout: EPIS for sequencing, CFIR for determinant diagnosis, RE-AIM for equity-disaggregated monitoring, hybrid designs as the default research vehicle, and implementation outcomes measured as rigorously as clinical ones (Aarons et al., 2011; Curran et al., 2012; Damschroder et al., 2022; Glasgow et al., 1999; Nilsen, 2015; Proctor et al., 2011).

5.5 Policy implications

Four policy translations follow. Coverage: the largest engagement lever observed is statutory; sustaining and extending public coverage and CCBHC prospective payment converts the framework's strongest coefficient into policy, with the caveat that public coverage without adequate networks reproduces the engagement shortfall visible in the public-insurance coefficient (OR = 1.30, nonsignificant). Housing: cross-sector financing that treats housing stabilization as behavioral health infrastructure addresses the determinant with the largest symptom effect (Kim et al., 2022; ODPHP, n.d.). Digital equity: broadband and device provisioning is, on this evidence, mental health access policy (Zhou et al., 2025). Accountability: equity dashboards disaggregated by race and ethnicity, coverage, and neighborhood, publicly reported under RE-AIM's reach dimension, convert equity from aspiration into a monitored performance standard (Glasgow et al., 1999; McGuire & Miranda, 2008).

5.6 Strengths and limitations

The article's strengths are its single cohesive thesis; its explicit mechanism layer linking structural determinants to engagement psychology; its formal, falsifiable propositions; its balanced incorporation of counterevidence; and the complete in-document reproducibility of its analytic component. The limitations are stated with equal directness. First, the analytic dataset is synthetic: although its generating model is fully disclosed (Appendix A) and calibrated to published epidemiology, it cannot support population inference; effect sizes are illustrative, and concordance between the synthetic patterns and the propositions is by construction suggestive, not evidential - the propositions await testing on real data. Second, the synthesis is narrative rather than systematic, without study-flow accounting or formal risk-of-bias grading, and the reference base, while rigorously verified, is selective rather than exhaustive (Baethge et al., 2019). Third, the cross-sectional design precludes causal ordering; housing instability and depression are plausibly bidirectional, and the mediation and moderation claims of Propositions 1 and 2 require longitudinal or experimental designs. Fourth, the framework is a theoretically grounded heuristic; conceptual validation through expert consensus methods (e.g., Delphi panels, stakeholder mapping) and empirical validation through the proposed proposition tests remain to be conducted. Fifth, sole authorship forgoes team-based interrater safeguards.

5.7 Future research

Five programs follow directly. First, proposition testing on authentic data: Proposition 1 via longitudinal mediation models in national survey or Medicaid claims data; Proposition 2 via digital-provisioning trials with moderation analysis; Proposition 3 via natural experiments in coverage and prospective-payment expansion, including difference-in-differences evaluation of CCBHC rollout (Curran et al., 2012; Mauri et al., 2024). Second, conceptual validation of the framework through Delphi consensus and cross-case comparison across implementing systems. Third, mechanism verification: measuring activation, trust, and alliance formation as mediating variables within collaborative care implementation, which no existing evaluation routinely does (Fluckiger et al., 2018; Hibbard et al., 2004). Fourth, implementation-failure science: prospective study of the inner-setting conditions separating trial-efficacious from routinely deliverable models (Fortney et al., 2022). Fifth, economic evaluation embedded in every trial, with equity-weighted cost-effectiveness as the reporting standard (Jacob et al., 2012; Leung et al., 2019).

6. Conclusion

High-disparity urban communities do not primarily lack programs; they inhabit systems whose architecture - coverage, housing, digital infrastructure, financing -

predicts who becomes symptomatic, who engages, and who is left to manage need alone, and that architecture reaches individual lives through the ordinary psychology of opportunity, activation, trust, and alliance. The evidence synthesized here, including its genuine tensions, and the reproducible analysis that illustrates it converge on one conclusion: only interventions that redesign structures and deliberately engage these psychological mechanisms - collaborative and integrated care with real facilitation, prospective-payment community platforms, digital and housing provisioning, community-partnered trust building - have demonstrated the capacity to narrow behavioral health inequities. The From Service Gaps to System Change framework organizes that redesign as a content-specific, mechanism-explicit, and falsifiable national pathway. The question this article leaves with clinicians, systems, and policymakers is accordingly not where the gaps are - that map is drawn - but whether the systems that produce them will be rebuilt, and whether the field will test the propositions that would tell us how.

Declarations

Funding: This work received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflicts of interest: The author declares no conflicts of interest.

Author contributions: J.S.M. conceived the work, conducted the synthesis, designed and executed the analytic demonstration, and drafted and revised the manuscript. The author approved the final version and takes responsibility for its integrity.

Ethics approval: Not applicable. The analytic dataset is synthetic and describes no real individuals; the synthesis used only published sources.

Data availability: The synthetic dataset's complete generating model, parameters, and random seed are specified in Appendix A of this article, permitting exact reproduction of every reported statistic; a machine-readable copy of the dataset and analysis code is available from the author on request.

References

1. Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. Administration and Policy in Mental Health and Mental Health Services Research, 38(1), 4-23. https://doi.org/10.1007/s10488-010-0327-7
2. Alegria, M., Alvarez, K., et al. (2016). Removing obstacles to eliminating racial and ethnic disparities in behavioral health care. Health Affairs, 35(6), 991-999. https://doi.org/10.1377/hlthaff.2016.0029
3. Alegria, M., NeMoyer, A., Falgas Bague, I., Wang, Y., & Alvarez, K. (2018). Social determinants of mental health: Where we are and where we need to go. Current Psychiatry Reports, 20(11), Article 95. https://doi.org/10.1007/s11920-018-0969-9
4. Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? Journal of Health and Social Behavior, 36(1), 1-10. https://doi.org/10.2307/2137284
5. Angstman, K. B., Phelan, S., Myszkowski, M. R., et al. (2015). Minority primary care patients with depression: Outcome disparities improve with collaborative care management. Medical Care, 53(1), 32-37.
6. Archer, J., Bower, P., Gilbody, S., Lovell, K., Richards, D., Gask, L., Dickens, C., & Coventry, P. (2012). Collaborative care for depression and anxiety problems. Cochrane Database of Systematic Reviews, 2012(10), Article CD006525. https://doi.org/10.1002/14651858.CD006525.pub2
7. Arean, P. A., Ayalon, L., Hunkeler, E., Lin, E. H. B., Tang, L., Harpole, L., Hendrie, H., Williams, J. W., Jr., & Unutzer, J. (2005). Improving depression care for older, minority patients in primary care. Medical Care, 43(4), 381-390. https://doi.org/10.1097/01.mlr.0000156852.09920.b1
8. Baethge, C., Goldbeck-Wood, S., & Mertens, S. (2019). SANRA-a scale for the quality assessment of narrative review articles. Research Integrity and Peer Review, 4, Article 5. https://doi.org/10.1186/s41073-019-0064-8
9. Braithwaite, J., Churruca, K., Long, J. C., Ellis, L. A., & Herkes, J. (2018). When complexity science meets implementation science: A theoretical and empirical analysis of systems change. BMC Medicine, 16, Article 63. https://doi.org/10.1186/s12916-018-1057-z
10. Brown, J. D., Stewart, K. A., Miller, R. L., Dehus, E., Rose, T., DeWitt, K., Chapman, R., Wishon, A., Breslau, J., Dey, J., & Jacobus-Kantor, L. (2022). Implementation and impacts of the Certified Community Behavioral Health Clinic demonstration: Findings from the national evaluation. U.S. Department of Health and Human Services.
11. Cook, B. L., et al. (2017). Trends in racial-ethnic disparities in access to mental health care, 2004-2012. Psychiatric Services, 68(1), 9-16. https://doi.org/10.1176/appi.ps.201500453
12. Curran, G. M., Bauer, M., Mittman, B., Pyne, J. M., & Stetler, C. (2012). Effectiveness-implementation hybrid designs: Combining elements of clinical effectiveness and implementation research to enhance public health impact. Medical Care, 50(3), 217-226. https://doi.org/10.1097/MLR.0b013e3182408812
13. Damschroder, L. J., Reardon, C. M., Widerquist, M. A. O., & Lowery, J. (2022). The updated Consolidated Framework for Implementation Research based on user feedback. Implementation Science, 17, Article 75. https://doi.org/10.1186/s13012-022-01245-0
14. Federal Communications Commission. (2024). 988 Suicide & Crisis Lifeline: Georouting requirements for wireless calls. https://www.fcc.gov/988-suicide-and-crisis-lifeline
15. Fluckiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. Psychotherapy, 55(4), 316-340. https://doi.org/10.1037/pst0000172

16. Fortney, J. C., Pyne, J. M., Kimbrell, T. A., Hudson, T. J., Robinson, D. E., Schneider, R., Moore, W. M., Custer, P. J., Grubbs, K. M., & Schnurr, P. P. (2015). Telemedicine-based collaborative care for posttraumatic stress disorder: A randomized clinical trial. JAMA Psychiatry, 72(1), 58-67. https://doi.org/10.1001/jamapsychiatry.2014.1575
17. Fortney, J. C., Rajan, S., Reisinger, H. S., Moeckli, J., Nolan, J. P., Wong, E. S., Rise, P., Petrova, V. V., Sayre, G. G., Pyne, J. M., Grubaugh, A., Simsek-Duran, F., Grubbs, K. M., Morland, L. A., Felker, B., & Schnurr, P. P. (2022). Deploying a telemedicine collaborative care intervention for posttraumatic stress disorder in the U.S. Department of Veterans Affairs: A stepped wedge evaluation of an adaptive implementation strategy. General Hospital Psychiatry, 77, 109-117. https://doi.org/10.1016/j.genhosppsych.2022.03.009
18. Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: The RE-AIM framework. American Journal of Public Health, 89(9), 1322-1327. https://doi.org/10.2105/AJPH.89.9.1322
19. Greenberg, P. E., Fournier, A.-A., Sisitsky, T., Simes, M., Berman, R., Koenigsberg, S. H., & Kessler, R. C. (2021). The economic burden of adults with major depressive disorder in the United States (2010 and 2018). PharmacoEconomics, 39(6), 653-665. https://doi.org/10.1007/s40273-021-01019-4
20. Hibbard, J. H., Stockard, J., Mahoney, E. R., & Tusler, M. (2004). Development of the Patient Activation Measure (PAM): Conceptualizing and measuring activation in patients and consumers. Health Services Research, 39(4, Pt. 1), 1005-1026. https://doi.org/10.1111/j.1475-6773.2004.00269.x
21. Huo, Y., Couzner, L., Windsor, T., Laver, K., Dissanayaka, N. N., & Cations, M. (2023). Barriers and enablers for the implementation of trauma-informed care in healthcare settings: A systematic review. Implementation Science Communications, 4. https://doi.org/10.1186/s43058-023-00428-0
22. Jacob, V., Chattopadhyay, S. K., Sipe, T. A., Thota, A. B., Byard, G. J., & Chapman, D. P. (2012). Economics of collaborative care for management of depressive disorders: A Community Guide systematic review. American Journal of Preventive Medicine, 42(5), 539-549. https://doi.org/10.1016/j.amepre.2012.01.011
23. Kaiser Family Foundation. (2024a). 988 Suicide & Crisis Lifeline: Two years after launch. https://www.kff.org/mental-health/988-suicide-crisis-lifeline-two-years-after-launch/
24. Kaiser Family Foundation. (2024b). Racial and ethnic disparities in mental health care: Findings from the KFF Survey of Racism, Discrimination and Health. https://www.kff.org/racial-equity-and-health-policy/
25. Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62(6), 593-602. https://doi.org/10.1001/archpsyc.62.6.593
26. Kim, H., et al. (2022). Housing instability and mental health among renters in the Michigan Recession and Recovery Study. Public Health, 209, 30-35. https://doi.org/10.1016/j.puhe.2022.05.015
27. Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. Journal of General Internal Medicine, 16(9), 606-613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x
28. LaVeist, T. A., Isaac, L. A., & Williams, K. P. (2009). Mistrust of health care organizations is associated with underutilization of health services. Health Services Research, 44(6), 2093-2105. https://doi.org/10.1111/j.1475-6773.2009.01017.x
29. Lee-Tauler, S. Y., Eun, J., Corbett, D., & Collins, P. Y. (2018). A systematic review of interventions to improve initiation of mental health care among racial-ethnic minority groups. Psychiatric Services, 69(6), 628-647. https://doi.org/10.1176/appi.ps.201700382
30. Leung, L. B., Rubenstein, L. V., Yoon, J., Post, E. P., Jaske, E., Wells, K. B., & Trivedi, R. B. (2019). Veterans Health Administration investments in primary care and mental health integration improved care access. Health Affairs, 38(8), 1281-1288. https://doi.org/10.1377/hlthaff.2019.00270
31. Mauri, A. I., Xiang, N., Adams, D. R., & Purtle, J. (2024). Proportion of US counties and population served by Certified Community Behavioral Health Clinics. JAMA Health Forum, 5(10), Article e243001.
32. McGuire, T. G., & Miranda, J. (2008). New evidence regarding racial and ethnic disparities in mental health: Policy implications. Health Affairs, 27(2), 393-403. https://doi.org/10.1377/hlthaff.27.2.393
33. Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation Science, 6, Article 42. https://doi.org/10.1186/1748-5908-6-42
34. Miranda, J., Bernal, G., Lau, A., Kohn, L., Hwang, W.-C., & LaFromboise, T. (2005). State of the science on psychosocial interventions for ethnic minorities. Annual Review of Clinical Psychology, 1, 113-142. https://doi.org/10.1146/annurev.clinpsy.1.102803.143822
35. National Council for Mental Wellbeing. (2024). 2024 CCBHC impact report.
36. Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. Implementation Science, 10, Article 53. https://doi.org/10.1186/s13012-015-0242-0
37. Office of Disease Prevention and Health Promotion. (n.d.). Housing instability. In Healthy People 2030. U.S. Department of Health and Human Services. https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/housing-instability

38. Olgac, T., McCann, E., Riske-Morris, M., & Hussey, D. L. (2025). A critical examination of the Certified Community Behavioral Health Clinic model: Provider perceptions and themes. Health Services Research. Advance online publication. https://doi.org/10.1111/1475-6773.70041
39. Painter, J. T., Fortney, J. C., Austen, M. A., & Pyne, J. M. (2017). Cost-effectiveness of telemedicine-based collaborative care for posttraumatic stress disorder. Psychiatric Services, 68(11), 1157-1163.
40. Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. Administration and Policy in Mental Health and Mental Health Services Research, 38(2), 65-76. https://doi.org/10.1007/s10488-010-0319-7
41. Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. Archives of Internal Medicine, 166(10), 1092-1097. https://doi.org/10.1001/archinte.166.10.1092
42. Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach (HHS Publication No. SMA 14-4884). U.S. Department of Health and Human Services.
43. Substance Abuse and Mental Health Services Administration. (2023). Key substance use and mental health indicators in the United States: Results from the 2022 National Survey on Drug Use and Health. https://www.samhsa.gov/data/report/2022-nsduh-annual-national-report
44. Substance Abuse and Mental Health Services Administration. (2024). Certified Community Behavioral Health Clinics (CCBHCs). https://www.samhsa.gov/certified-community-behavioral-health-clinics
45. Swift, J. K., & Greenberg, R. P. (2012). Premature discontinuation in adult psychotherapy: A meta-analysis. Journal of Consulting and Clinical Psychology, 80(4), 547-559. https://doi.org/10.1037/a0028226
46. Thota, A. B., Sipe, T. A., Byard, G. J., Zometa, C. S., Hahn, R. A., McKnight-Eily, L. R., Chapman, D. P., Abraido-Lanza, A. F., Pearson, J. L., Anderson, C. W., Gelenberg, A. J., Hennessy, K. D., Duffy, F. F., Vernon-Smiley, M. E., Nease, D. E., Jr., & Williams, S. P. (2012). Collaborative care to improve the management of depressive disorders: A Community Guide systematic review and meta-analysis. American Journal of Preventive Medicine, 42(5), 525-538. https://doi.org/10.1016/j.amepre.2012.01.019
47. Unutzer, J., Katon, W., Callahan, C. M., Williams, J. W., Jr., Hunkeler, E., Harpole, L., Hoffing, M., Della Penna, R. D., Noel, P. H., Lin, E. H. B., Arean, P. A., Hegel, M. T., Tang, L., Belin, T. R., Oishi, S., & Langston, C. (2002). Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. JAMA, 288(22), 2836-2845. https://doi.org/10.1001/jama.288.22.2836
48. von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gotzsche, P. C., & Vandenbroucke, J. P. (2007). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. The Lancet, 370(9596), 1453-1457. https://doi.org/10.1016/S0140-6736(07)61602-X
49. Wells, K. B., Jones, L., Chung, B., et al. (2013). Community-partnered cluster-randomized comparative effectiveness trial of community engagement and planning or resources for services to address depression disparities. Journal of General Internal Medicine, 28(10), 1268-1278. https://doi.org/10.1007/s11606-013-2484-3
50. Woltmann, E., Grogan-Kaylor, A., Perron, B., Georges, H., Kilbourne, A. M., & Bauer, M. S. (2012). Comparative effectiveness of collaborative chronic care models for mental health conditions across primary, specialty, and behavioral health care settings: Systematic review and meta-analysis. American Journal of Psychiatry, 169(8), 790-804. https://doi.org/10.1176/appi.ajp.2012.11111616
51. Zhou, W. Y., Franzini, L., & Vargas Bustamante, A. (2025). Adolescent mental health utilization, virtual care, and community support: Evidence from 2019 to 2022. Frontiers in Public Health, 13, Article 1559511. https://doi.org/10.3389/fpubh.2025.1559511
52. Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment, 52(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2
53. Note on references: For five entries (Alegria et al., 2016; Angstman et al., 2015; Cook et al., 2017; Kim et al., 2022; Wells et al., 2013), the complete author lists could not be fully verified at the time of writing and are abbreviated; full lists should be completed from the source of record prior to submission.