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REVIEW

Improving Outcomes for Black Adults with Diabetes: The Power of Peer Support in the Multidisciplinary Care Team

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Abstract: Black adults experience diabetes complications and mortality in disproportionate rates in the United States, with barriers to care driven by factors such as limited access to quality healthcare, socioeconomic disparities, racial discrimination contributing to mistrust and health misperceptions, and social determinants of health such as food insecurity. Poor diabetes outcomes occur, in part due to insufficient access to novel diabetes medications and technologies, and low participation in diabetes management education programs. Within care teams across various healthcare settings, limited health literacy, and poor patient-provider communication, often influenced by implicit bias, further hinders effective diabetes management. Peer support, especially when integrated effectively into a multidisciplinary care team, is a promising approach to address these challenges. Peer supporters, individuals with shared lived experience and cultural backgrounds can foster trust, translate medical guidance in lay terms, and provide ongoing and sustained emotional, social, and tangible support. Peer-led interventions reduce diabetes distress and improve self-efficacy, medication adherence, and clinical outcomes, especially when tailored for Black adults. To effectively integrate peer supporters into care teams, defined roles, structured workflows, and strategically engaging them in patient care planning and team meetings is needed. Comprehensive and robust training, certifications, and continuing education ensure their competence, while maintaining role authenticity. Visibility within clinic and healthcare spaces, role clarity, administrative support, funding and continuous evaluation enhance the sustainability of peer supporters. Facilitators of their role include policy advocacy and funding avenues including Medicaid and Medicare reimbursements. Future efforts should focus on policy reforms to address structural inequities, support the expansion of peer supporters within care teams, including focused roles to thrive professionally, and establish sustainable models through participatory designs and robust evaluations. To address diabetes inequities in Black adults, culturally tailored peer support within multidisciplinary teams is critical, requiring collaborative engagement of healthcare systems, communities, and policy makers.

Keywords: chronic disease management, health disparities, integrated care, policy reform, sustainability, care coordination

Introduction

Diabetes in Black Adults

Diabetes affects Black adults in the United States at a disproportionately higher rate, with the prevalence of diagnosed diabetes being one of the highest among all racial and ethnic groups, and twice the prevalence compared to non-Hispanic White adults.[1] Black adults with diabetes are also 1.5 times likely to be hospitalized, and 2.7 times more likely to die from the disease.[2] These diabetes disparities are mostly driven by systemic barriers such as limited healthcare access, racial and socioeconomic inequalities, discrimination experiences, and social contributors to health such as food insecurity.[3,4] Other barriers that lead to poor management of diabetes among Black adults include limited access to insulin, newer classes of medications,[5] and diabetes technology devices such as continuous glucose monitors,[6,7] and low

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participation rates in diabetes self-management education programs due to lack of cultural adaptation[8] and/or addressing of health misperceptions.[9–11] Consequently, Black adults have disproportionate rates of diabetes-related complications such as kidney disease, vision loss, heart disease/stroke, and lower limb amputations, as well as reduced quality of life compared to their white counterparts.[12,13]

Related to receiving services from a diabetes care team in different clinical settings, there are different ways in which barriers to optimal diabetes care can manifest for Black adults. For example, health literacy and patient provider communication are essential components of effective self-management in Black adults with diabetes.[3,14] Low health literacy hinders the ability to understand complex diabetes management regimens and treatment plans, which can be further exacerbated by diabetes care services that do not reflect Black adults' cultural needs or lived experiences.[15] Also, implicit bias from providers who provide care for diabetes management can lead to undertreatment, miscommunication, and reduced engagement in care. These interconnected patient-related barriers are frequently observed in diabetes care services provided in clinics and healthcare settings and can lead to reduced patient trust in healthcare, decreased engagement and adherence to treatment,[16,17] and subsequently poor diabetes outcomes, leading to widening disparities for Black adults.

Peer Support: Format and Mechanism of Action

Peer support, especially when embedded into multidisciplinary care teams, is a promising solution for addressing disparities and overcoming barriers faced by Black adults with diabetes.[18,19] Peer supporters are individuals who share similar lived experiences, cultural backgrounds, or disease journeys with other individuals.[19] Though they can offer empathetic guidance, encouragement, and practical strategies for self-management to others with diabetes, they are often underutilized within diabetes care teams in clinic and healthcare settings. Based on the social cognitive and empowerment theory, peer support is based on role modeling, observation, and reciprocal exchange among individuals or groups that can foster behavior change and self-efficacy.[18–21]

Based on previous literature,[22–24] a peer-support person should have personal lived experience managing diabetes or have provided care for someone who has diabetes, should be able to provide emotional, motivation, and practical support, and have strong communication and interpersonal skills (eg, empathy and a nonjudgemental attitude).[25] Other criteria that can be used for recruitment include alignment with the program population based on language, culture or familiarity with the community especially for Black adults with diabetes with unique cultural values, norms, and preferences. There should also be a commitment to confidentiality and respecting boundaries. In non-volunteer/paid staff roles such as community health workers, training expectations may be required such as community health worker (CHW) state recognized certification and having a basic knowledge of diabetes self-management education and motivational interviewing principles.[18,26–28] Due to interfacing with clinicians as part of a multidisciplinary group, additional criteria that may be preferred include experience navigating local resources for social needs, comfort with technology, and ability to coordinate care via teamwork.[29]

Peer support has been delivered in various forms to enhance disease self-management including one-on-one pairings, group discussions, online forums or social media platforms, and interventions led by CHWs or health coaches.[18] Across peer-delivered interventions, whether CHW-led, race-concordant matched paired mentors, and/or technology enhanced peer models, the mechanisms by which support is offered for patients with chronic diseases like diabetes include through emotional and psychosocial support, knowledge sharing about disease management, increased accountability, and modeling of success strategies that can lead to increased self-efficacy and confidence in disease self-management.[28,30,31] Further, reducing barriers to care through trust building, practical problem solving of social needs, and sustained encouragement for Black adults might differ across the types of peer intervention, including how the trust is generated and knowing what kind of support is most feasible to implement within an organizational setting.

CHW-led peer models are usually structurally integrated into health or community organizations and can address a wide range of patients needs such as social needs navigation, appointment coordination, patient follow-ups, and health education especially when meaningfully integrated into care teams and referral workflows. However, trained CHWs even with good supervision, need clearly defined roles and adequate compensation as CHWs may be constrained by "task saturation" where they are focused on social needs resolution without adequate staffing, compensation, or authority, causing increased burnout and reduced fidelity and sustainability.

Race-concordant peer mentors can strengthen engagement of populations who face historical and ongoing medical mistrusts and stigma as their role is grounded in their shared identity with peers and their relational credibility.[32] While concordance may increase rapport and improve acceptability of interventions, they can be difficult to scale because of workforce availability, and risk of assumptions that shared race implies shared values or experiences.[33] There is also likely emotional labor on the race-matched mentor who may relive the trauma of their own lived experience or be positioned as a representative of the entire demographic group.[34]

On the other hand, technology-enhanced peer models using features such as texts, apps, telehealth coaching, moderated forums, etc, highlight a priority for scalability and accessibility of peer support, particularly since geography, scheduling or transportation could limit in-person contact. This type of support can lower the cost associated with peer-participant interactions and increase care continuity.[35] However, digital access and digital literacy can influence who participates, and the strength of the relationship may be diluted compared to in-person support which enhances trust and accountability. This is an important consideration since peer support is grounded on these two factors. Technology models also raise concerns about privacy protections and engagement attrition which could reduce their effectiveness despite their high reach.[36]

Overall, these varying approaches to peer support models should best be viewed as complementary to each other as CHW-led programs address structural and navigational issues, race-concordant peers emphasize trust, cultural safety and stigma reduction, while technology-enabled peer models enhance increased reach and continuity (Table 1).

Beyond the label of who the "peer" is, peer model implementation hinges on how peer supporters are trained, supervised, compensated, and integrated within care systems. Although peer support is effective, its structured integration within multidisciplinary care teams for Black adults remains insufficiently examined. Compared to other prior reviews on peer support, this paper focuses on the implementation of peer supporters into a multidisciplinary care team with an emphasis on considerations for integration structures, policy financing, and sustainability.

Peer Support Among Black Adults

There is ample evidence that various formats of peer support interventions can lead to significant improvements in diabetes outcomes.[10,11,37,38] For example, a study showed that individual telephone peer support for adults with diabetes led to improved glycemic control and self-care behaviors, while group-based support including community health worker

Table 1 Comparison of Peer Support Delivery Models for Black Adults with Diabetes

Dimension	CHW-Led Peer Models	Race-Concordant Peer Mentors	Technology-Enhanced Peer Models
Integration structure	Embedded in health/community organizations; addresses social needs, appointment coordination, health education	Paired by shared racial identity; relational integration	Platform-based; operates independently or as care team supplement
Primary strengths	Addresses wide range of patient needs; effective when integrated into referral workflows	Strengthens engagement among populations with historical medical mistrust; relational credibility	Scalable; reaches rural/dispersed populations; lower per-contact cost
Key limitations	Risk of task saturation without adequate staffing or authority; burnout risk	Difficult to scale due to workforce availability; risk of assuming shared race implies shared values	Digital access/literacy barriers; relationship may be diluted vs. in-person; privacy concerns
Trust mechanism	Institutional credibility + community connection	Shared racial/cultural identity and lived experience	Convenience, anonymity, and peer testimonials
Best used when…	Patients have complex social needs requiring navigation and coordination	High medical mistrust or stigma; cultural safety is paramount	Geography or scheduling limits in-person contact; scalability is a priority

(CHW) interventions led to reduced diabetes distress and improved medication adherence.[39] In another study, a CHW diabetes self-management education program with added peer leader support led to sustained improvements in A1c and depressive symptoms, over 18 months.[40]

Within Black communities, peer support has shown effectiveness in diabetes outcomes. In a randomized-controlled trial of a diabetes self-management education program including mHealth-enhanced peer support compared with the self-management program alone, low-income African American adults with poorly controlled type 2 diabetes, experienced a larger reduction in diabetes distress.[41] Studies by Shiyanbola et al showed that tailoring peer support programs to fit the cultural experiences and needs of Black adults, via group discussions addressing provider distrust and medication and diabetes misperceptions, led to signals of improvements in medication adherence, glycemic control, and psychosocial outcomes.[10,11,37,38] Similarly, Ewen et al found positive changes in A1c levels, general diet and blood glucose monitoring, and blood pressure among Black men who completed a peer-led and empowerment-based Diabetes Self-Management Education and Support intervention.[21] Overall, peer support, irrespective of the format it is delivered, can lead to improvement in diabetes outcomes for Black adults and should be leveraged within multidisciplinary care teams to address diabetes disparities.

Multidisciplinary Team-Based Care in Diabetes

For comprehensive diabetes management, using multidisciplinary teams including primary care physicians, nurses, dietitians, pharmacists, and behavioral health professionals is highly recommended, based on the 2026 American Diabetes Association Standards of Medical Care.[42] Studies have shown that treatment of diabetes in multidisciplinary teams with pharmacists or behavioral health professionals is associated with reduced A1c levels.[43–46] In a pharmacist-led multidisciplinary team within a safety-net primary care clinic, there was improved A1c and behavioral outcomes for patients with type 2 diabetes.[47] In a systematic review/meta-analysis that evaluated the clinical outcomes of patients with uncontrolled diabetes within multidisciplinary collaborative care models, defined as care provided by at least two different care providers, A1c and blood pressure significantly improved over 3–12 months.[48] In a review of peer supporters embedded within shared medical appointments (in-person doctor-patient visits in which groups of patients are seen by one or more healthcare providers), results showed significant reductions in A1c, suggesting that the engagement of clinicians, other healthcare team members, and peer supporters in diabetes interventions enhances diabetes outcomes.[28] In a scoping review of varying peer support models embedded into primary care settings, results showed promising improvements in A1c.[49]

Limited studies have investigated the effectiveness of multidisciplinary teams among Black adults. In a randomized controlled study of a multidisciplinary behavioral intervention for Black adults with diabetes, integrated care from a community health worker, the patient's primary care physician, a diabetes nurse educator, and a clinical pharmacist led to better diabetes self-management, diabetes self-efficacy, and trust in the healthcare system compared to usual care participants. However, the intervention was not better than usual care at preventing emergency room visits and hospitalizations.[50] However, in an intensive intervention involving a CHW and nurse collaborating to care for urban Black adults with diabetes, 23% were less likely to have an emergency room visit over 2 years.[51] While multidisciplinary team-based care can be effective for Black adults with diabetes, reducing system-level barriers to build community health care capacity, and designing interventions that better align with the everyday realities of patients' lives are needed.[50] In this paper, we discuss how peer support is critical in addressing diabetes disparities among Black adults, especially when peer supporters are integrated as a critical part of a multidisciplinary care team.

Integration into the Multidisciplinary Team

Roles and Responsibilities Within the Care Team

Effective integration of peer support into multidisciplinary diabetes care requires clear delineation of roles that leverage the unique contributions of each team member.[52] Peer supporters bring what no other team member can offer: lived experience, credibility and cultural concordance that builds trust with patients who may be skeptical of traditional healthcare.[53,54] Within the care team, peer supporters serve several complementary functions.[55] As cultural mediators, they bridge communication gaps between patients and healthcare providers, translating medical recommendations into

culturally relevant guidance. They facilitate connections to medical and social services, and as systems navigators helping patients manage insurance, appointments, and pharmacy access.[55] Their role as health educators differs from formal diabetes educators in that peers share experiential knowledge and practical strategies developed through their own self-management journeys. Perhaps most critically, peers serve as patient advocates ensuring equitable access to quality care, and as social support providers who reduce isolation and offer emotional encouragement (Figure 1).

Due to peers' ability to contribute to clinical decision-making processes by leveraging their patient experience, it may be beneficial for them to demonstrate some minimal diabetes-related knowledge. Adding peer supporters in multidisciplinary care allows the clinician to focus on final clinical decision making while incorporating the input of the peer supporter in diabetes care management.[56,57] However, there is a potential risk or unintended consequences of peer supporter's role which include role strain, emotional distress and burnout, and overreliance on them to compensate for structural inequities.[58,59]

Distinguishing peer supporters from other team members helps prevent role confusion and supports effective inter-disciplinary collaboration.[60] Unlike nurses who handle medical management and medications,[61] peers provide non-clinical support focused on daily self-management challenges. Unlike social workers who address complex crises,[62] peers offer ongoing relational support and encouragement. While certified diabetes care and education specialists provide formal instruction,[63] peers supplement formal education with real-world problem-solving and sustained motivation. And while case managers coordinate care for high-complexity patients,[64] peers develop longer-term relationships that extend beyond acute care episodes. Identifying appropriate patients for peer support enhances program impact.[60] Ideal candidates could include those with suboptimal glycemic control (A1c above 8–9%),[65] significant social determinants of health barriers such as food insecurity or housing instability, frequent emergency department utilization,[66,67] or evidence of medical mistrust and low engagement with traditional care – characteristics common among Black adults with diabetes.[66]

Workflow and Communication Structures

Successful integration in multidisciplinary diabetes care teams requires structured workflows that embed peer support into routine clinical operations.[68] Referral processes may include both scheduled referrals based on screening criteria and warm handoffs during clinic visits, where clinicians and other providers directly introduce patients to peer supporters. Warm handoffs are

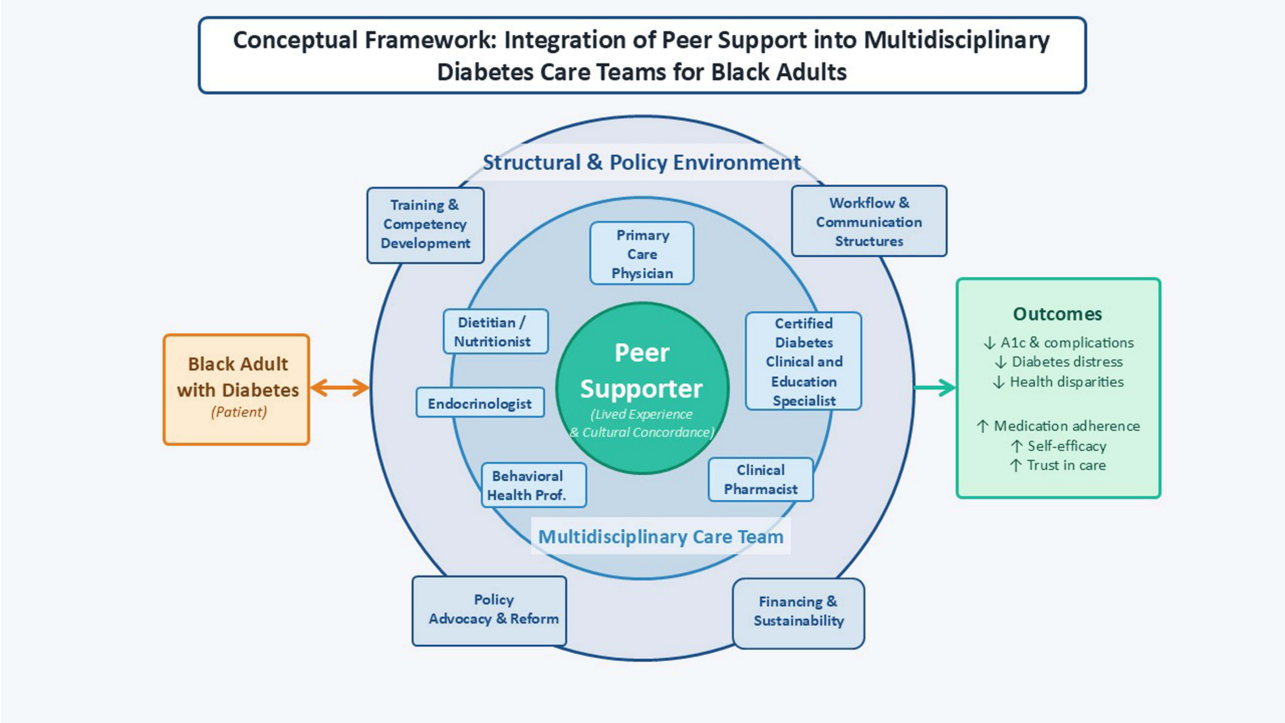

Figure 1 Conceptual Framework: Integration of Peer Support into Multidisciplinary Diabetes Care Teams for Black Adults. The peer supporter (center) bridges the patient and care team through lived experience and cultural concordance, within a structural environment of training, workflows, financing, and policy advocacy.

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particularly valuable for building initial trust, as the endorsement of a known provider signals credibility.[67,69,70] Co-location of peer supporters within clinical spaces facilitates accessibility and visibility.[68] When peers are physically present in primary care settings, they become readily available for spontaneous consultations and can participate in care planning discussions. This proximity also normalizes peer support as an integral component of comprehensive care rather than an add-on service.

Documentation and information sharing are essential for care coordination. Peer supporters should have electronic health record access to document encounters, including social determinant assessments, barriers identified, resources connected, and patient progress in their disease self-management journey.[71] Structured documentation templates ensure consistency and facilitate communication with the broader care team. Regular feedback loops such as monthly summaries to referring providers with immediate escalation protocols for urgent issues maintain bidirectional communication.

Team integration extends beyond documentation to active participation in care planning. Peers should be included in multidisciplinary team meetings and case conferences,[55] as they can contribute insights into patient circumstances that may not emerge in clinical encounters. Pre-clinic huddles allow teams to discuss scheduled patients and coordinate peer outreach.[70] Integration of peer support goals into formal patient care plans reinforces their role as valued team members and ensures accountability.[72,73]

Caseload management typically involves 20–30 patients per peer supporter, with a mix of home visits, phone calls, and clinic encounters.[74] Contact frequency should be highest initially, weekly during the first month which can then transition to monthly maintenance contacts as patients stabilize. Flexibility for intensive support during critical periods, such as hospital discharge or personal crises, allows responsive care that meets patients where they are.[67]

Training and Competency Development

Quality peer support depends on structured training that balances formal skill development with preservation of experiential authenticity. The Community Health Worker Core Consensus (C3) Project provides a national framework identifying ten core roles and eleven essential skills, with connection to community recognized as the most critical competency.[60,75] Training duration varies by role, with comprehensive community health worker certification typically requiring 48–160 hours, while diabetes-specific peer training may involve 2–12 weeks of focused preparation.

Core training content should include diabetes pathophysiology and self-management, medication fundamentals, complication prevention, nutrition education, social determinants screening, motivational interviewing, cultural humility, and documentation practices.[39,76] Training approaches range from state certification programs which are available in 27 states in the US to diabetes-specific curricula such as the Diabetes Self-Management Education and Support Programs.[77] Hybrid models combining intensive initial training with ongoing teleconference support have demonstrated effectiveness.[54,70]

Ongoing professional development maintains competency and prevents skill decline. Most certification programs require 24 contact hours of continuing education over three years.[76] Specialized training in mental health first aid, trauma-informed care, and telehealth expand peer capacity to address complex patient needs. Peer learning networks and communities of practice provide both skill development and emotional support for those in helping roles.[54]

Supervision structures should address both clinical and administrative needs.[78] Regular individual or group clinical supervision with qualified professionals such as a social worker, nurse, or experienced community health worker supervisor provides space for case consultation, boundary management, and processing emotionally challenging encounters. Administrative oversight through biweekly or monthly meetings addresses performance evaluation, workload management, and program coordination.

Quality metrics should span process, outcome, and fidelity dimensions.[60] Process metrics could include patients enrolled, contact frequency, documentation completion, and team meeting attendance. Outcome metrics encompass clinical measures such as A1c changes, behavioral outcomes including self-management and medication adherence, healthcare utilization patterns, patient activation, and satisfaction. Fidelity metrics assess adherence to core peer support functions and evidence-based approaches. Program-level quality assurance includes stakeholder advisory committees with community representation, quarterly program evaluations, monthly dashboard reviews, and continuous quality improvement cycles.[78] Equally important is peer support for the peer supporters themselves including group supervision for shared learning and emotional support, reasonable caseloads to prevent burnout, and recognition initiatives that acknowledge the demanding nature of their work. These key points are presented in Table 2.

Table 2 Peer Support Training and Competency Development Considerations

Domain	Key Points
Guiding principle	High-quality peer support requires structured training that builds formal skills while preserving lived experience authenticity
National framework	Community Health Worker Core Consensus (C3) Project outlines core roles and essential skills; connection to community is the most critical competency
Initial training duration	Training length varies by role
Core training content	Foundational diabetes knowledge and support skills
Training delivery models	Multiple pathways exist and can be combined.
Ongoing professional development	Continuing education prevents decline in skill and maintains competency
Specialized skills	Expands ability to meet peers' complex needs
Peer learning supports	Helps build skills and reduce isolation/emotional burden
Supervision- clinical	Regular individual/group supervision supports safe practice, helps with case consultations, and coping with difficult encounters
Supervision-administrative	Ensures program execution and accountability. Allows for performance evaluation, workload management
Quality checks of peer roles	Focus on process metrics - meeting attendance, completing documentation etc, fidelity to peer functions

Implementation Guidance

Pre-Implementation Planning

Successful peer support programs begin with thorough needs assessment and stakeholder engagement.[79] Analysis of population health data—diabetes prevalence, A1c distribution, diabetes complication rates, and existing diabetes disparities, identifies high-need subgroups and geographic priorities. Mapping existing community resources reveals gaps that peer support can address while avoiding duplication of services.

Stakeholder engagement should occur early and include leadership, frontline providers, and community members. Securing organizational buy-in from administrators establishes institutional commitment. Engaging providers and identifying physician champions build clinical support. Partnering with community organizations such as churches, community-based organizations, and trusted local institutions ensures cultural relevance and community ownership. Including potential peer supporters in program design, consistent with community-based participatory research principles, enhances program acceptability and sustainability. Program design decisions should address target population and selection criteria, peer support model selection appropriate to local needs and resources, structured workflows and protocols, job descriptions with specific roles and responsibilities, supervision structures, and sustainability planning including diversified funding strategies.[30]

Facilitators of Successful Implementation

Implementation science research has identified key facilitators of successful peer support integration.[54] Administrative support including visible leadership endorsement, adequate sustained funding, logistical resources, and protected time for training provides the foundation for program success. Role clarity through written guidelines, staff education about peer support value, and regular communication prevents confusion and territorial conflicts.[60] Team cohesion requires treating peers as equal team members, including them in meetings and quality improvement projects, and proactively addressing concerns.[75] Access and visibility—co-locating peers in clinical settings, making them available for warm handoffs, and marketing services through multiple channels increases utilization. Stakeholder buy-in grows through sharing evidence on effectiveness, identifying and empowering physician/provider champions, and disseminating success stories that

demonstrate early wins. Structured program functioning includes clear referral criteria and processes, feedback loops between peers and providers, standardized workflows for common scenarios, and continuous quality improvement.[60] Programs that establish these structures early demonstrate stronger implementation outcomes and sustainability.

Common Barriers and Solutions

Organizational barriers include inadequate funding, space constraints, and insufficient leadership support.[54] Solutions involve pursuing Medicaid reimbursement (now available in 27 US states), applying for grants, advocating for health system operational budget allocation, utilizing creative scheduling and shared spaces or telehealth options, and presenting return-on-investment data and success stories aligned with value-based care goals.[80]

Team and provider barriers often involve role confusion, skepticism about peer qualifications, territorial concerns, and poor communication.[55] Addressing these barriers requires clear written guidelines and ongoing staff education – emphasizing that peers complement rather than replace professional roles, structured feedback mechanisms including EHR documentation and regular team meetings and highlighting the unique value peers bring through lived experience.

Patient-level barriers include unfamiliarity with peer support, stigma concerns, and practical obstacles like transportation and scheduling conflicts. Solutions include clear explanation of services with provider introductions, voluntary participation with confidentiality assurances and emphasis on shared experience, and flexible delivery options including home visits, phone calls, video sessions, and evening or weekend availability.[74,81] Peer supporter barriers encompass skill gaps, burnout risk, and boundary challenges.[78] Comprehensive initial training with ongoing professional development, reasonable caseloads with peer support groups and recognition, and supervision explicitly addressing self-disclosure decisions and work-life boundaries provide protective structures (Table 3).

Financing and Sustainability

Sustainable financing increasingly relies on Medicaid reimbursement, with 27 US states now offering coverage for community health worker services as of January 2024.[77,80] State Plan Amendments represent the most common mechanism, with Section 1115 waivers providing alternative pathways in US states like Massachusetts, New Jersey, and North Carolina. Managed care contracts increasingly require community health worker staffing ratios.

At the federal level, reimbursement pathways are evolving. The Centers for Medicare & Medicaid Services has expanded coverage for services delivered by auxiliary personnel under clinician supervision through existing care management and education-related billing codes, creating new opportunities for financing peer and community health worker services in both fee-for-service and managed care contexts. Medicare coverage in the US is expanding, with the first community health worker billing codes introduced in the 2024 Physician Fee Schedule.[82] Alternative funding sources include health system operational budgets (particularly in accountable care organizations, federally qualified health centers, and hospitals), federal grants from CDC and other agencies, foundation grants, local government funds, and value-based care arrangements with performance incentives.

Table 3 Common Barriers to Peer Support Integration and Recommended Solutions

Organizational	Inadequate funding; space constraints; insufficient leadership support	Pursue Medicaid reimbursement (27 states); apply for grants; present ROI data aligned with value-based care goals; use telehealth/shared spaces
Team/Provider	Role confusion; skepticism about peer qualifications; territorial concerns; poor communication	Clear written guidelines; staff education emphasizing peers complement (not replace) professional roles; EHR documentation and regular team meetings
Patient-Level	Unfamiliarity with peer support; stigma concerns; transportation/scheduling barriers	Provider introductions with clear service explanation; voluntary participation with confidentiality assurances; flexible delivery (home visits, phone, video, evenings/weekends)
Peer Supporter	Skill gaps; burnout risk; boundary challenges; emotional labor	Comprehensive initial training with ongoing development; reasonable caseloads; peer support groups and recognition; supervision addressing self-disclosure and work-life boundaries

Cost-effectiveness evidence, while still emerging, suggests that peer support interventions are generally cost-effective or cost-neutral, particularly when targeted to high-risk populations.[60] Reductions in emergency department use and hospitalizations may offset program costs, although additional longer-term economic evaluations are needed to fully characterize cost-effectiveness.

Sustainability strategies should emphasize diversified funding streams rather than reliance on single sources, state-level policy advocacy for expanded payment models, documentation of outcomes and return on investment, and transition planning from grant-dependent pilot programs to sustainable reimbursement-based operations.[54] Programs that build sustainability planning into initial program design demonstrate longer-term viability.

Future Directions and Recommendations

Based on the review of the literature, there is robust evidence on the effectiveness of peer support for adults with diabetes, but limited information on its effectiveness among Black adults with diabetes in multidisciplinary care teams. We propose the following priorities and recommendations for integrating peer support into multidisciplinary teams that care for Black adults with diabetes.

Addressing Structural Inequities in Diabetes Care via Policy Reform and Advocacy

Persistent disparities in diabetes outcomes for Black adults are deeply rooted in systemic inequities including access barriers, discrimination in healthcare delivery and provider communication, and socioeconomic disadvantage.[2] Hence, multi-level policy reforms must be prioritized. *First*, Black adults have higher rates of underinsurance and lack of health insurance coverage, which can undermine their access to primary care physicians, diabetes care specialists, new diabetes medications including GLP-1s, and novel diabetes technologies such as automated insulin delivery, continuous glucose monitors, etc.[83–85] Improved healthcare access is needed, and advocacy for improved healthcare access and health insurance as well as expanded Medicaid coverage is critical.[86]

Second, it is evident from numerous studies that when race/ethnicity-concordant health professionals provide care to Black adults, there is a more effective therapeutic patient-provider relationship,[87] improved engagement in health behaviors, satisfaction in care delivery,[88] and adherence to prescribed treatment recommendations.[89] Therefore, workforce diversification is critical. Policies that incentivize recruitment and retention of Black peer supporters and community healthcare workers should be developed.[90] Mandates with direct funding for anti-racism and implicit bias training, and cultural humility education for providers that engage with Black patients in diabetes care and will work with peer supporters should be provided.[91]

Third, with the critical need to integrate social determinants of health (SDOH) programs in clinics, primary care settings, etc, which will increase access and reduce barriers to healthcare;[92] SDOH navigations within multidisciplinary diabetes care teams are needed. Obtaining policy support for health care systems that leverage peer supporters to directly address food insecurity, unstable housing, transportation, employment, etc.[4] can help individuals and communities achieve better diabetes outcomes and health equity. Cross-sector collaborations across individuals, organizational and policy levels are an essential step for health care systems and non-health partners.[93] Integrated approaches that address the root causes of SDOH barriers to diabetes management need built coalitions and involvement of faith-based, local government, business institutions, etc.[94–96] Future research should investigate whether varying SDOH navigation systems, and types of peer supporters work better for a group of patients with various complex social and medical needs.[97]

Fourth, there should be legislation to support Medicaid[98] and Medicare reimbursement for peer support persons, peer support coaches, and peer support services. As more states in the US are starting reimbursement for community health workers and peer support services within community centers, and health systems;[99,100] continued and consistent policy advocacy can ensure its expansion and sustainability nationally and globally.

Finally, federal investment in public health infrastructure will allow for the development, expansion, and sustainability of community-based diabetes prevention and self-management programs that are tailored and adapted for Black adults. Integrating peer support into these programs allows for improved engagement, and effectiveness. Black communities should be empowered to participate in health policy designs and evaluation, and healthcare organization discussions which ensures

peer support programs within diabetes care teams are community driven, and culturally congruent.[101–103] Participatory research initiatives that engage peer supporters will foster trust and enhance uptake of policy initiatives.[104]

Workforce Development and Integration of Peer Supporters into Multidisciplinary Teams

The development of recruitment and retention strategies for peer supporters must be advanced within diabetes care teams, healthcare systems, and community-based organizations. For peer supporters to thrive in their role, structured career paths and ladders should be developed including providing advanced training, formal certification, competitive remuneration, etc. This allows peer support roles to be positioned as a viable long-term profession.[71] Without these established career pathways, peer supporters will not feel supported, and their visibility is likely to be diminished.[105] To enhance the effectiveness of peer supporter training, a culturally tailored curriculum co-created with Black peers, Black patients and their community should be implemented, with focused attention on topics that culturally influence diabetes care outcomes for Black adults including historical medical mistrust, trauma-informed care, SDOH screening and referrals, and culturally tailored diabetes management topics.

Mentorship networks and peer mentor programs can be created within health systems where peer supporters can offer ongoing coaching, training, supervision, and emotional support to reduce burnout. As already stated, formally integrating peer supporters into multidisciplinary care teams require clearly defined roles to avoid confusion which can affect group dynamics within the care team.[28] Well integrated teams can be also established by empowering peers in clinical decision making, allowing for contribution to care plans and team meetings, and providing opportunities for them to share insights from their own lived experience.[106] However, there should be clear delineation of decision-making authority and safeguards in the inclusion of peer supporters within these multidisciplinary care teams. It is important to maintain clinical governance standards with deference of clinical decisions to providers, while preserving the unique strengths of experiential knowledge of peer supporters.

For peer supporters to function efficiently and effectively, workflows and protocols should be established and formalized, enhancing interdisciplinary collaborations and meetings.[107] By doing this, healthcare teams and health care organizations can ensure their peer supporters are empowered to work as an integral member of the multidisciplinary care team.

Formal coaching and supervisory structures do increase administrative costs moderately, due to time needed to train peer supporters, supervisor time for coaching and supervision, and operational resources needed for peer supporter scheduling, fidelity monitoring, management of communication platforms, and organization of documentation workflows.[108] Cost-contained methods could include group-based supervision to streamline discussion of cases, and less intensified one-on-one peer performance evaluation. Supervision roles could also be shared with other similar staff roles within the clinic/health system, and technology could be used to automate parts of fidelity monitoring.[109] These costs can prevent larger downstream costs due to workforce turnover, inconsistent documentation and fidelity issues, safety incidents, and low supporter engagement.[54,109]

Criteria for selecting peer coaches are in some cases like those of the peer supporters they are supervising, including having a lived experience with diabetes, commitment to confidentiality and boundaries, having cultural humility and community alignment, and being reliable, and consistent. Beyond this, some criteria for the supervisory peer coach's role could include having long term experience with success as a peer coach, prior mentoring experience, advanced interpersonal skills, team collaboration experience especially with a clinical team, and some familiarity with documentation and fidelity monitoring.[108,110] A training strategy for supervisory peer coaches could include an emphasis on patient empowerment approaches, peer support skills, behavior change techniques, and diabetes core competencies. Role plays, case scenarios, and training on workflow tools and documentation are methods that can support their training.[111]

Peer Supporters in Diabetes Technology and Health Care Delivery Design

As mentioned in this review, hybrid approaches to delivering peer support, including blended in-person, telehealth, digital peer support etc, can expand reach for rural and geographically dispersed communities.[112,113] Peer support can be

enhanced and delivered by technology within diabetes care teams. Technology-enhanced peer support that includes smartphone applications, group video chats, and online communities should be tailored for Black adults, while leveraging platforms that are widely disseminated among this population and can be used by peer supporters in care teams.

There are inequities in the distribution of diabetes technology among Black adults, resulting in poorer outcomes.[114] Recommendations for health systems to offer financial assistance or free access to continuous glucose monitors, and related technologies for uninsured or underinsured individuals have been documented. As well, literature has acknowledged the disparities in device prescription patterns and offer of technological devices among providers, partly due to unconscious bias based on race, income, or insurance.[115,116] Beyond this, when Black adults receive a diabetes care technology or device, peer supporters can be leveraged to demystify these devices through peer education and technology literacy programs, offering practical demonstrations, peer testimonials, and troubleshooting experiences, especially for those with limited digital literacy. They could also be trained as navigators to help patients access telehealth platforms, and diabetes management apps. Systemically, to reduce disparities in diabetes care technologies among Black adults,[117] peer supporters should be involved as partners with technology firms co-designing digital health tools, apps, and devices, to ensure cultural fit, accessibility, and usability for Black adults. Industry collaboration allows for inclusive and user-centered designs that ensure diabetes technology innovations include the feedback and community perspectives of peer supporters.[118]

Innovative health care delivery models can also be leveraged with peer supporters. They can be positioned on-site in high-need clinical settings such as emergency departments, federally qualified health centers and ambulatory care settings that predominately serve Black populations. Group education clinic sessions could be led by peer supporters, which blend self-management, goal setting, and skill building with social connections based on lived experience.

Sustaining and Evaluating Peer Support Interventions

There is already robust evidence highlighting the critical role of peer support for Black adults with diabetes.[10,11,21,37,40,119–122] Future work should now focus on tailoring and scaling the various peer support delivery models already available. Sustaining and evaluating peer support interventions require innovative approaches that center on participatory design models, financial stability, and comprehensive evaluation strategies.[40] To sustain peer-supported diabetes programs, participatory designs and models are critical.[123] Co-creation with community organizations embedded within Black communities such as local barbershops, faith-based institutions, etc can enhance uptake of peer supported diabetes programs. Using participatory evaluation models that regularly engage Black peer supporters, and community partners can enhance continuous quality improvement.[124]

With regard to evaluation of peer supporters, we caution not to attribute downstream clinical outcomes to a peer support person as there are several other factors that can influence outcomes such as A1c. There are several possible mechanisms for evaluating what peer supporters within a multidisciplinary setting could directly influence, which is separate from an organization's overall evaluation outcome. Peer support is party relational based on trust and empathy and for it to be operational within a health system/clinic/organization, there needs to be outreach and documentation.[54,125] Therefore, some individual level metrics could be patient engagement rates and continuity metrics based on appointment adherence, number of completed contacts, follow-up, retention, etc, and complete linkage to care through navigation/referral follow-through.[126] Participant reported experiences through surveys, and qualitative feedback on trust, perceived helpfulness, and diabetes distress support, can also be incorporated into performance evaluation. If a peer supporter is effectively embedded into a clinical workflow, timeliness and quality of documentation is a metric that could be assessed.[29,127] If technology enhanced peer support is implemented, digital engagement metrics based on number of logins, and messages can be treated as evidence of reach and responsiveness and incorporated into performance evaluation.[29] Direct observations from supervisors, structured rubrics, and chart/documentation audits are data sources that can inform individual evaluation.[126]

Funding streams for reimbursing and funding peer supporters should be diversified beyond grants. Health system operating budgets, philanthropic funds, Medicaid/Medicare reimbursements, and value-based payment models can enhance financial sustainability for peer supporters. Evaluations of peer supporter programs embedded into multi-disciplinary care teams that document cost-effectiveness, data on outcomes, health care utilization, and quality adjusted life years can help build a case for institutional and payer investment.[73] Data-driven improvement cycles that track and

share process and clinical outcomes metrics with health system and organizational leaders can demonstrate the value of peer supporters within care teams. Return on investment evaluations should incorporate economic modeling information that incorporates productivity gains, long-term diabetes complications, interventions and system level savings.[128,129] By demonstrating value using both quantitative (health outcomes, clinical metrics, and cost-effectiveness data) and qualitative feedback from participants, diverse stakeholders' perspectives can be shifted, paying the way for broader institutionalization and policy support.

Conclusion

There is an urgent need to address diabetes-related health disparities for Black adults. Though this review showed robust evidence supporting the effectiveness of peer supporters, especially within multidisciplinary diabetes care teams, it is based on current evidence in literature which shows the heterogeneity of peer support models, with limited long-term randomized controlled trial data specific to Black adults, and few examples of implementation/sustainability peer support models for Black adults within clinical/health system settings. There is an urgent need for more implementation studies and evaluation of sustainability approaches, rather than more descriptive research. Three actionable takeaways include implementation guidance to define peer supporter's role clearly, secure pathways to reimburse peer supporters, and embed peers into care team workflows to leverage their lived experience. Cross sectoral and multisector collaborations involving healthcare providers, community-based organizations, researchers, and policymakers are needed to enhance the role, efficiency, effectiveness, and sustainability of peer supporters in diverse care team settings. The integration of peer supporters for the care of Black adults with diabetes is a critical key to structural health equity reform.

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References

1. Close DM. National diabetes statistics report. Centers for Disease Control and Prevention; 2025.
2. Chow EA, Foster H, Gonzalez V, McIver L. The disparate impact of diabetes on racial/ethnic minority populations. *Clin Diabetes*. 2012;30(3):130–133. doi:10.2337/diaclin.30.3.130
3. Walker RJ, Smalls BL, Campbell JA, Strom Williams JL, Egede LE. Impact of social determinants of health on outcomes for type 2 diabetes: a systematic review. *Endocrine*. 2014;47(1):29–48. doi:10.1007/s12020-014-0195-0
4. Hill-Briggs F, Adler NE, Berkowitz SA, et al. Social determinants of health and diabetes: a scientific review. *Diabetes Care*. 2020;44(1):258. doi:10.2337/dci20-0053
5. Boateng S, Ameyaw P, Issaka Y, Al-Ajlouni YA, Njei B. Racial and ethnic disparities in early uptake of GLP-1 receptor agonists in patients with and without MASLD. 2025.
6. Owusu B, Bivins B, Juste J, et al. Continuous glucose monitoring for black older adults with type 2 diabetes mellitus: challenges, innovations and implications: a discursive review. *J Adv Nurs*. 2024;80(9):3616–3624. doi:10.1111/jan.16277
7. Messer LH, Addala A, Weinzimer SA. Real-world diabetes technology: overcoming barriers and disparities. *Diabetes Technol Ther*. 2023;25(S1):S176–S190. doi:10.1089/dia.2023.2511
8. Shiyanbola O, Maurer M, Wen M-J, et al. Culturally tailoring the delivery of an evidence-based diabetes self-management program for black adults to enhance reach, adoption, implementation and effectiveness. AcademyHealth; 2024.
9. Shiyanbola O, Wen M-J, Maurer M. 651-P: enhancing diabetes self-management—feasibility and impact of a culturally tailored program for black adults using an embedded mixed methods pilot implementation trial. *Diabetes*. 2025;74(Supplement_1):651–P. doi:10.2337/db25-651-P
10. Shiyanbola OO, Maurer M, Schwerer L, et al. A culturally tailored diabetes self-management intervention incorporating race-congruent peer support to address beliefs, medication adherence and diabetes control in African Americans: a pilot feasibility study. *Patient Prefer Adherence*. 2022;Volume 16:2893–2912. doi:10.2147/PPA.S384974
11. Wen M-J, Maurer M, Pickard AL, Hansen M, Shiyanbola OO. A pilot mixed methods randomized control trial investigating the feasibility and acceptability of a culturally tailored intervention focused on beliefs, mistrust and race-congruent peer support for Black adults with diabetes. *Front Public Health*. 2025;13:1474027. doi:10.3389/fpubh.2025.1474027
12. Wang L, Li X, Wang Z, et al. Trends in prevalence of diabetes and control of risk factors in diabetes among US adults, 1999–2018. *JAMA*. 2021;326(8):704–716. doi:10.1001/jama.2021.9883
13. Zelnick LR, Weiss NS, Kestenbaum BR, et al. Diabetes and CKD in the United States population, 2009–2014. *Clin J Am Soc Nephrol*. 2017;12(12):1984–1990. doi:10.2215/CJN.03700417

14. Walker LF. *Relationship of Provider-Patient Communication and Health Literacy to Self-Management in Black Adults with Type-2 Diabetes*. Walden University; 2025.
15. Anim SB, Spurlark R, Turkson-Ocran R-A, Bohr N, Soco C, Simonovich SD. A systematic review of the relationship between discrimination, racism, and type 2 diabetes healthcare outcomes for Black Americans. *J Racial Ethn Health Disparities*. 2024;11(5):2935–2944. doi:10.1007/s40615-023-01751-x
16. Hill-Briggs F, Ephraim PL, Vrany EA, et al. Social determinants of health, race, and diabetes population health improvement: Black/African Americans as a population exemplar. *Curr Diab Rep*. 2022;22(3):117–128. doi:10.1007/s11892-022-01454-3
17. AshaRani PV, Roystonn K, Ramu M, et al. Exploring the lived experiences of patients with type 2 diabetes mellitus-related complications in a healthcare setting in Singapore: a phenomenological study. *BMJ Public Health*. 2025;3(2):e003183. doi:10.1136/bmjph-2025-003183
18. Fisher EB, Tang PY, Coufal M, et al. Peer support. In: *Chronic Illness Care: Principles and Practice*. Springer; 2023:113–127.
19. Tang PY, Fisher EB. Enhancing peer support interventions in diabetes care. In: *Behavioral Diabetes: Social Ecological Perspectives for Pediatric and Adult Populations*. Springer; 2020:417–437.
20. Fisher EB, Brownson CA, O'Toole ML, Shetty G, Anwuri VV, Glasgow RE. Ecological approaches to self-management: the case of diabetes. *Am J Public Health*. 2005;95(9):1523–1535. doi:10.2105/AJPH.2005.066084
21. Ewen AM, Hawkins JM, Kloss KA, et al. The Michigan Men's diabetes project randomized clinical control trial: a pilot/feasibility study of a peer-led diabetes self-management and support intervention for black men with type 2 diabetes. *Am J Mens Health*. 2024;18(3):15579883241258318. doi:10.1177/15579883241258318
22. Smith S, Paul G, Kelly A, Whitford DL, O'Shea E, O'Dowd T. Peer support for patients with type 2 diabetes: cluster randomised controlled trial. *BMJ*. 2011;342:d715. doi:10.1136/bmj.d715
23. Heisler M. Overview of peer support models to improve diabetes self-management and clinical outcomes. *Diabetes Spectr*. 2007;20(4):214. doi:10.2337/diaspect.20.4.214
24. Zhong X, Li S, Luo M, Ma X, Fisher EB. Peer support self-management intervention for individuals with type 2 diabetes in rural primary care settings: protocol for a mixed methods study. *JMIR Res Protoc*. 2023;12(1):e47822. doi:10.2196/47822
25. Hendrieckx C, Halliday J, Beeney L, Speight J. *Diabetes and Emotional Health: A Practical Guide for Health Professionals Supporting Adults with Type 1 or Type 2 Diabetes*. Deakin University; 2020.
26. Norris SL, Lau J, Smith SJ, Schmid CH, Engelgau MM. Self-management education for adults with type 2 diabetes: a meta-analysis of the effect on glycemic control. *Diabetes Care*. 2002;25(7):1159–1171. doi:10.2337/diacare.25.7.1159
27. Norris SL, Chowdhury FM, Van Le K, et al. Effectiveness of community health workers in the care of persons with diabetes. *Diabetic Med*. 2006;23(5):544–556. doi:10.1111/j.1464-5491.2006.01845.x
28. Werner JJ, Ufholz K, Yamajala P. Recent findings on the effectiveness of peer support for patients with type 2 diabetes. *Curr Cardiovasc Risk Rep*. 2024;18(5):65–79. doi:10.1007/s12170-024-00737-6
29. Fisher EB, Boothroyd RI, Coufal MM, et al. Peer support for self-management of diabetes improved outcomes in international settings. *Health Affairs*. 2012;31(1):130–139. doi:10.1377/hlthaff.2011.0914
30. Heisler M, Choi H, Mase R, Long JA, Reeves PJ. Effectiveness of technologically enhanced peer support in improving glycemic management among predominantly African American, low-income adults with diabetes. *Diabetes Educ*. 2019;45(3):260–271. doi:10.1177/0145721719844547
31. Kaselitz E, Shah M, Choi H, Heisler M. Peer characteristics associated with improved glycemic control in a randomized controlled trial of a reciprocal peer support program for diabetes. *Chronic Illn*. 2019;15(2):149–156. doi:10.1177/1742395317753884
32. Perry HB, Zulliger R, Rogers MM. Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annu Rev Public Health*. 2014;35:399–421. doi:10.1146/annurev-publhealth-032013-182354
33. Street RL, O'Malley KJ, Cooper LA, Haidet P. Understanding concordance in patient-physician relationships: personal and ethnic dimensions of shared identity. *Ann Fam Med*. 2008;6(3):198–205. doi:10.1370/afm.821
34. Nelson A. Unequal treatment: confronting racial and ethnic disparities in health care. *J Natl Med Assoc*. 2002;94(8):666.
35. Eysenbach G, Powell J, Englesakis M, Rizo C, Stern A. Health related virtual communities and electronic support groups: systematic review of the effects of online peer to peer interactions. *BMJ*. 2004;328(7449):1166. doi:10.1136/bmj.328.7449.1166
36. Barak A, Boniel-Nissim M, Suler J. Fostering empowerment in online support groups. *Comput Human Behav*. 2008;24(5):1867–1883. doi:10.1016/j.chb.2008.02.004
37. Maurer M, Wen M-J, Deheck J, et al. Investigating the added value of a culturally tailored peer support intervention for black adults with diabetes: a randomized mixed methods pilot trial. *Diabetes Metab Syndr Obes*. 2025;18:4609–4629. doi:10.2147/DMSO.S548440
38. Shiyanbola OO, Tarfa A, Song A, Sharp LK, Ward E. Preliminary feasibility of a peer-supported diabetes medication adherence intervention for African Americans. *Health Behav Policy Rev*. 2019;6(6):558–569. doi:10.14485/HBPR.6.6.2
39. Tang TS, Funnell M, Sinco B, et al. Comparative effectiveness of peer leaders and community health workers in diabetes self-management support: results of a randomized controlled trial. *Diabetes Care*. 2014;37(6):1525–1534. doi:10.2337/dc13-2161
40. Spencer MS, Kieffer EC, Sinco B, et al. Outcomes at 18 months from a community health worker and peer leader diabetes self-management program for Latino adults. *Diabetes Care*. 2018;41(7):1414–1422. doi:10.2337/dc17-0978
41. Presley CA, Mondesir FL, Juarez LD, et al. Social support and diabetes distress among adults with type 2 diabetes covered by Alabama Medicaid. *Diabet Med*. 2021;38(4):e14503. doi:10.1111/dme.14503
42. ElSayed NA, Baig A, Balapattabi K, et al. Standards of Care in Diabetes—2025 Abridged for Primary Care. *Clin Diabetes*. 2025;43:182.
43. McGill M, Blonde L, Chan JCN, Khunti K, Lavalle FJ, Bailey CJ. The interdisciplinary team in type 2 diabetes management: challenges and best practice solutions from real-world scenarios. *J Clin Transl Endocrinol*. 2017;7:21–27. doi:10.1016/j.jcte.2016.12.001
44. Benedict AW, Spence MM, Sie JL, et al. Evaluation of a pharmacist-managed diabetes program in a primary care setting within an integrated health care system. *J Manag Care Spec Pharm*. 2018;24(2):114–122. doi:10.18553/jmcp.2018.24.2.114
45. Chwastiak LA, Jackson SL, Russo J, et al. A collaborative care team to integrate behavioral health care and treatment of poorly-controlled type 2 diabetes in an urban safety net primary care clinic. *Gen Hosp Psychiatry*. 2017;44:10–15. doi:10.1016/j.genhosppsych.2016.10.005
46. Helou N, Dwyer A, Shaha M, Zanchi A. Multidisciplinary management of diabetic kidney disease: a systematic review and meta-analysis. *JBI Database System Rev Implement Rep*. 2016;14(7):169–207. doi:10.11124/jbisrir-2016-003011

47. Phillips S, Culpepper J, Welch M, et al. A multidisciplinary diabetes clinic improves clinical and behavioral outcomes in a primary care setting. *J Am Board Fam Med*. 2021;34(3):579–589. doi:10.3122/jabfm.2021.03.200307
48. Siaw MYL, Lee JY. Multidisciplinary collaborative care in the management of patients with uncontrolled diabetes: a systematic review and meta-analysis. *Int J Clin Pract*. 2019;73(2):e13288. doi:10.1111/ijcp.13288
49. Lu S, Leduc N, Moullec G. Type 2 diabetes peer support interventions as a complement to primary care settings in high-income nations: a scoping review. *Patient Educ Couns*. 2022;105(11):3267–3278. doi:10.1016/j.pec.2022.08.010
50. Rovner BW, Casten R, Chang AM, et al. Interprofessional intervention to reduce emergency department visits in Black individuals with diabetes. *Popul Health Manag*. 2023;26(1):46–52. doi:10.1089/pop.2022.0216
51. Gary TL, Batts-Turner M, Yeh H-C, et al. The effects of a nurse case manager and a community health worker team on diabetic control, emergency department visits, and hospitalizations among urban African Americans with type 2 diabetes mellitus: a randomized controlled trial. *Arch Intern Med*. 2009;169(19):1788–1794. doi:10.1001/archinternmed.2009.338
52. Fisher EB, Ayala GX, Ibarra L, et al. Contributions of peer support to health, health care, and prevention: papers from peers for progress. *Ann Fam Med*. 2015;13:S2–S8. doi:10.1370/afm.1852
53. Brownson CA, Heisler M. The role of peer support in diabetes care and self-management. *Patient*. 2009;2(1):5–17. doi:10.2165/01312067-200902010-00002
54. Fisher EB, Boothroyd RI, Elstad EA, et al. Peer support of complex health behaviors in prevention and disease management with special reference to diabetes: systematic reviews. *Clin Diabetes Endocrinol*. 2017;3:4. doi:10.1186/s40842-017-0042-3
55. Peretz PJ, Matiz LA, Findley S, Lizardo M, Evans D, McCord M. Community health workers as drivers of a successful community-based disease management initiative. *Am J Public Health*. 2012;102(8):1443–1446. doi:10.2105/ajph.2011.300585
56. Aziz Z, Riddell MA, Absetz P, Brand M, Oldenburg B; Australasian Peers for Progress Diabetes Project Investigators. Peer support to improve diabetes care: an implementation evaluation of the Australasian Peers for Progress Diabetes Program. *BMC Public Health*. 2018;18(1):262. doi:10.1186/s12889-018-5148-8
57. World Health Organization. Diabetes. Available from: https://www.who.int/health-topics/diabetes#tab=tab_1. Accessed March 14, 2026.
58. Werfalli M, Raubenheimer PJ, Engel M, et al. The effectiveness of peer and community health worker-led self-management support programs for improving diabetes health-related outcomes in adults in low-and-middle-income countries: a systematic review. *Syst Rev*. 2020;9(1):133. doi:10.1186/s13643-020-01377-8
59. Kane L, Portman RM, Eberhardt J, et al. Peer supporters' mental health and emotional wellbeing needs: key factors and opportunities for co-produced training. *Health Expect*. 2023;26(6):2387–2395. doi:10.1111/hex.13836
60. Rosenthal EL, Fox DJ, St. John JA, et al. The community health worker core consensus (c3) project story: confirming the core roles and skills of community health workers. In: *Promoting the Health of the Community: Community Health Workers Describing Their Roles, Competencies, and Practice*. Springer; 2021:11–35.
61. Harper MG, Maloney P. Nursing professional development: revision of the scope and standards of practice. *J Nurses Prof Dev*. 2016;32(3):171–173. doi:10.1097/NND.0000000000000255
62. Cox LE, Fritz T, Little LV, et al. *Standards for Social Work Practice in Health Care Settings*. Washington: National Association of Social Workers; 2015.
63. Powers MA, Bardsley J, Cypress M, et al. Diabetes self-management education and support in type 2 diabetes: a joint position statement of the American Diabetes Association, the American Association of Diabetes Educators, and the academy of nutrition and dietetics. *J Acad Nutr Diet*. 2015;115(8):1323–1334. doi:10.1016/j.jand.2015.05.012
64. Powell SK, Tahan HM. *Case Management: A Practical Guide for Education and Practice*. Lippincott Williams & Wilkins; 2018.
65. American Diabetes Association Professional Practice Committee for Diabetes. Introduction and Methodology: standards of Care in Diabetes—2026. *Diabetes Care*. 2026;49(Supplement_1):S1–S5. doi:10.2337/dc26-SINT
66. Peek ME, Gorawara-Bhat R, Quinn MT, Odoms-Young A, Wilson SC, Chin MH. Patient trust in physicians and shared decision-making among African-Americans with diabetes. *Health Commun*. 2013;28(6):616–623. doi:10.1080/10410236.2012.710873
67. Kangovi S, Mitra N, Grande D, et al. Patient-centered community health worker intervention to improve posthospital outcomes: a randomized clinical trial. *JAMA Intern Med*. 2014;174(4):535–543. doi:10.1001/jamainternmed.2013.14327
68. Martinez-Donate AP, Zumaeta-Castillo C, Yamasaki Y, et al. Feasibility and acceptability of CRiSOL: a pilot peer-based intervention to address syndemic health issues afflicting Latino immigrants in the US. *PLoS One*. 2023;18(10):e0287248. doi:10.1371/journal.pone.0287248
69. Kangovi S, Mitra N, Grande D, Huo H, Smith RA, Long JA. Community health worker support for disadvantaged patients with multiple chronic diseases: a randomized clinical trial. *Am J Public Health*. 2017;107(10):1660–1667. doi:10.2105/AJPH.2017.303985
70. Kangovi S, Mitra N, Norton L, et al. Effect of community health worker support on clinical outcomes of low-income patients across primary care facilities: a randomized clinical trial. *JAMA Intern Med*. 2018;178(12):1635–1643. doi:10.1001/jamainternmed.2018.4630
71. Balcazar H, Lee Rosenthal E, Nell Brownstein J, Rush CH, Matos S, Hernandez L. Community health workers can be a public health force for change in the United States: three actions for a new paradigm. *Am J Public Health*. 2011;101(12):2199–2203. doi:10.2105/AJPH.2011.300386
72. Martinez J, Ro M, William Villa N, Powell W, Knickman JR. Transforming the delivery of care in the post–health reform era: what role will community health workers play? *Am J Public Health*. 2011;101(12):e1–e5. doi:10.2105/AJPH.2011.300335
73. Abuse S. Substance Abuse and Mental Health Services Administration (SAMHSA): supporting and financing peer services. 2024. Available from: https://library.samhsa.gov/product/supporting-and-financing-peer-services/pep24-02-012. Accessed April 14, 2026.
74. Piette JD, Resnicow K, Choi H, Heisler M. A diabetes peer support intervention that improved glycemic control: mediators and moderators of intervention effectiveness. *Chronic Illn*. 2013;9(4):258–267. doi:10.1177/1742395313476522
75. Allen CG, Brownstein JN, Cole M, Hirsch G, Williamson S, Rosenthal EL. Building a framework for community health worker skills proficiency assessment to support ongoing professional development. *J Ambul Care Manage*. 2018;41(4):298–307. doi:10.1097/jac.0000000000000251
76. National Association of Community Health Workers. State community health worker certification standards. 2022. Available from: https://nachw.org/. Accessed January 24, 2026.

77. Jones TM, Schulte A, Ramanathan S, Assefa M, Rebala S, Maddox PJ. Evaluating the association of state regulation of community health workers on adoption of standard roles, skills, and qualities by employers in select states: a mixed methods study. *Hum Resour Health*. 2021;19 (1):148. doi:10.1186/s12960-021-00684-y
78. Crigler L, Gergen J, Perry H. *Supervision of Community Health Workers*. Washington (DC): USAID/Maternal and Child Health Integrated Program (MCHIP); 2013.
79. Israel M, Kamman ML, McCray ED, Sindelar PT. Mentoring in action: the interplay among professional assistance, emotional support, and evaluation. *Except Child*. 2014;81(1):45–63. doi:10.1177/0014402914532231
80. D'Alessandro M, Wilkniss S, Rush C. State community health worker policies: 2024–2025 trends. 2025. Available from: https://nashp.org/state-community-health-worker-policies-2024-2025-policy-trends/. Accessed April 10, 2026.
81. Barrera M, Glasgow RE, McKay HG, Boles SM, Feil EG. Do Internet-based support interventions change perceptions of social support?: an experimental trial of approaches for supporting diabetes self-management. *Am J Community Psychol*. 2002;30(5):637–654. doi:10.1023/A:1016369114780
82. Center for Health Care Strategies. Policy cheat sheet: changes to the 2024 medicare physician fee schedule for community health integration services. Available from: https://www.chcs.org/resource/changes-to-2024-medicare-physician-fee-schedule-for-community-health-integration-services/. Accessed January 24, 2026.
83. Fantasia KL, Wirunsawanya K, Lee C, Rizo I. Racial disparities in diabetes technology use and outcomes in type 1 diabetes in a safety-net hospital. *J Diabetes Sci Technol*. 2021;15(5):1010–1017. doi:10.1177/1932296821995810
84. García-Tirado J, Villard O, Hall M, Bisio A, Gonder-Frederick L. Under-representation of diverse populations and glycemic outcomes in major clinical trials of automated insulin delivery. *Diabetes Technol Ther*. 2023;25(10):752–754. doi:10.1089/dia.2023.0197
85. Al Nofal A, Hassan D, Rajjo T, Heien HC, McCoy RG. Disparities in technology utilization among youth with type 1 diabetes across diverse racial and socioeconomic backgrounds. *BMJ Open Diabetes Res Care*. 2025;13(3):e004935. doi:10.1136/bmjdrc-2025-004935
86. Canedo JR, Miller ST, Schlundt D, Fadden MK, Sanderson M. Racial/ethnic disparities in diabetes quality of care: the role of healthcare access and socioeconomic status. *J Racial Ethn Health Disparities*. 2018;5(1):7–14. doi:10.1007/s40615-016-0335-8
87. Ku L, Vichare A. The association of racial and ethnic concordance in primary care with patient satisfaction and experience of care. *J Gen Intern Med*. 2023;38(3):727–732. doi:10.1007/s11606-022-07695-y
88. Jetty A, Jabbarpour Y, Pollack J, Huerto R, Woo S, Petterson S. Patient-physician racial concordance associated with improved healthcare use and lower healthcare expenditures in minority populations. *J Racial Ethn Health Disparities*. 2022;9(1):68–81. doi:10.1007/s40615-020-00930-4
89. Strumpf EC. Racial/ethnic disparities in primary care: the role of physician-patient concordance. *Med Care*. 2011;49(5):496–503. doi:10.1097/MLR.0b013e31820fbee4
90. Saha S, Komaromy M, Koepsell TD, Bindman AB. Patient-physician racial concordance and the perceived quality and use of health care. *Arch Intern Med*. 1999;159(9):997–1004. doi:10.1001/archinte.159.9.997
91. Churchwell K, Elkind MS, Benjamin RM, et al. Call to action: structural racism as a fundamental driver of health disparities: a presidential advisory from the American Heart Association. *Circulation*. 2020;142(24):e454–e468. doi:10.1161/CIR.0000000000000936
92. Novilla MLB, Goates MC, Leffler T, et al. Integrating social care into healthcare: a review on applying the social determinants of health in clinical settings. *Int J Environ Res Public Health*. 2023;20(19):6873. doi:10.3390/ijerph20196873
93. Egede LE, Ozieh MN, Campbell JA, Williams JS, Walker RJ. Cross-sector collaborations between health care systems and community partners that target health equity/disparities in diabetes care. *Diabetes Spectr*. 2022;35(3):313–319. doi:10.2337/dsi22-0001
94. Peek ME, Gottlieb LM, Doubeni CA, et al. Advancing health equity through social care interventions. *Health Serv Res*. 2023;58:318–326. doi:10.1111/1475-6773.14244
95. Peek ME, Tanumihardjo JP, O'Neal Y, et al. Intensity and variation of health navigator support: addressing medical and social needs of diabetes patients in East Oakland. *J Gen Intern Med*. 2024;39(9):1616–1624. doi:10.1007/s11606-023-08590-w
96. Williams JS, Walker RJ, Peek ME, Chin MH. Integrating medical and social care to reduce diabetes inequities: lessons from the bridging the gap program. *J Gen Intern Med*. 2023;38(Suppl 1):1–3. doi:10.1007/s11606-022-07977-5
97. Brunton SA. Social determinants of health: a critical consideration in diabetes management. *Clin Diabetes*. 2022;40:138–139. doi:10.2337/cd22-0004
98. Medicaid and Chip Payment Access Commission. *Medicaid Coverage of Community Health Worker Services*. MACPAC Washington; 2022.
99. Erikson C, Tiunn H-L, Herring J, Luo E, Pittman P. Medicaid billing for community health worker services growing, but remains low, 2016–2020. *Health Aff Scholar*. 2025;3(1):qxae164. doi:10.1093/haschl/qxae164
100. Kaiser. State policies for expanding Medicaid coverage of community health worker services. Available from: https://www.kff.org/medicaid/state-policies-for-expanding-medicaid-coverage-of-community-health-worker-chw-services/. Accessed January 20, 2026.
101. South J, Phillips G. Evaluating community engagement as part of the public health system. *J Epidemiol Community Health*. 2014;68 (7):692–696. doi:10.1136/jech-2013-203742
102. Roach M, Fritz J. Breaking barriers and building bridges: increasing community engagement in program evaluation. *Evaluat Prog Plann*. 2022;90:101997. doi:10.1016/j.evalprogplan.2021.101997
103. Haldane V, Chuah FL, Srivastava A, et al. Community participation in health services development, implementation, and evaluation: a systematic review of empowerment, health, community, and process outcomes. *PLoS One*. 2019;14(5):e0216112. doi:10.1371/journal.pone.0216112
104. Palmer-Wackerly AL, Chaidez V, Wayment C, Baker J, Adams A, Wheeler LA. Listening to the voices of community health workers: a multilevel, culture-centered approach to overcoming structural barriers in US Latinx communities. *Qual Health Res*. 2020;30(3):423–436. doi:10.1177/1049732319855963
105. Hartzler AL, Tuzzio L, Hsu C, Wagner EH. Roles and functions of community health workers in primary care. *Ann Fam Med*. 2018;16 (3):240–245. doi:10.1370/afm.2208
106. Rosen MA, DiazGranados D, Dietz AS, et al. Teamwork in healthcare: key discoveries enabling safer, high-quality care. *Am Psychologist*. 2018;73(4):433. doi:10.1037/amp0000298
107. Traylor DO, Anderson EE, Etsey M, et al. Practical care coordination for primary care providers: bridging the gap between clinical practice and patient outcomes. 2025.

108. Substance Abuse and Mental Health Services Administration (US). Incorporating peer support into substance use disorder treatment services [Internet]. Rockville (MD). Treatment Improvement Protocol (TIP) Series, No. 64. Available from: https://www.ncbi.nlm.nih.gov/books/NBK596260/. Accessed March 24, 2026.
109. Brown LD, Vasquez D, Wolf J, Robison J, Hartigan L, Hollman R. Supporting peer support workers and their supervisors: cluster-randomized trial evaluating a systems-level intervention. *Psychiatric Serv*. 2024;75(6):514–520. doi:10.1176/appi.ps.20230112
110. Tang TS, Funnell MM, Gillard M, Nwankwo R, Heisler M. Training peers to provide ongoing diabetes self-management support (DSMS): results from a pilot study. *Patient Educ Couns*. 2011;85(2):160–168. doi:10.1016/j.pec.2010.12.013
111. Turpin A, Shier ML. Peer support and substance use disorder treatment: benefits and barriers for intra-personal development in longer-term treatment programs. *J Groups Addict Recover*. 2017;12(2–3):117–134. doi:10.1080/1556035X.2016.1258683
112. Mirbahaeddin E, Chreim S. Transcending technology boundaries and maintaining sense of community in virtual mental health peer support: a qualitative study with service providers and users. *BMC Health Serv Res*. 2024;24(1):510. doi:10.1186/s12913-024-10943-y
113. Tang TS, Klein G, Görges M, et al. 696-P: evaluating REACHOUT—A mobile app that delivers peer-led mental health support to adults with type 1 diabetes. *Diabetes*. 2023;72(Supplement_1):696–P. doi:10.2337/db23-696-P
114. Hatef E, Hudson Scholle S, Buckley B, Weiner JP, Austin JM. Development of an evidence-and consensus-based Digital Healthcare Equity Framework. *JAMIA Open*. 2024;7(4):ooae136. doi:10.1093/jamiaopen/ooae136
115. Saeed SA, Masters RM. Disparities in health care and the digital divide. *Curr Psychiatry Rep*. 2021;23(9):61. doi:10.1007/s11920-021-01274-4
116. Addala A, Amedari MI, Figg LE, Ebekozien O. Disparities in access to and use of diabetes technologies and therapeutics: a narrative review. *Diabetologia*. 2025;68(11):2430–2448. doi:10.1007/s00125-025-06494-4
117. Chen AM. Digital Disparities in Healthcare: a Tale of the Haves and Have-Nots? *J Patient Exp*. 2025;12:23743735251343585. doi:10.1177/23743735251343585
118. Tang TS, Johal P, Azhar A, Fisher L, Polonsky WH, Görges M. 576-P: cocreating a virtual care platform that delivers mental health support to adults with Type 1 Diabetes (T1D) living in rural and remote communities. *Diabetes*. 2022;71(Supplement_1):576–P. doi:10.2337/db22-576-P
119. Weerasinghe SA, Wang G, Izadikhah Z, Goh Y, Ireland MJ. Psychosocial interventions for diabetes distress in culturally diverse populations: a systematic scoping review. *BMJ open*. 2025;15(10):e102630. doi:10.1136/bmjopen-2025-102630
120. Shiyanbola OO, Maurer M, Mott M, et al. A feasibility pilot trial of a peer-support educational behavioral intervention to improve diabetes medication adherence in African Americans. *Pilot Feasibility Stud*. 2022;8(1):240. doi:10.1186/s40814-022-01198-7
121. Tang TS, Funnell MM, Sinco B, Spencer MS, Heisler M. Peer-led, empowerment-based approach to self-management efforts in diabetes (PLEASED): a randomized controlled trial in an African American community. *Ann Fam Med*. 2015;13(Suppl 1):S27–S35. doi:10.1370/afm.1819
122. Turner CD, Lindsay R, Heisler M. Peer coaching to improve diabetes self-management among low-income Black veteran men: a mixed methods assessment of enrollment and engagement. *Ann Fam Med*. 2021;19(6):532–539. doi:10.1370/afm.2742
123. Green JB, Crowley MJ, Thirunavukkarasu S, Maruthur NM, Oldenburg B. The final frontier in diabetes care: implementing research in real-world practice. *Diabetes Care*. 2024;47(8):1299–1310. doi:10.2337/dci24-0001
124. Mikkelsen TJ, Jensen DM, Stenager E, Rothmann MJ. Collaborative innovations in diabetes self-care for individuals with type 2 diabetes and schizophrenia: a Participatory Design study developing a diagnosis-specific educational manual. *Diabetes Metab Syndr*. 2025;19(3):103220. doi:10.1016/j.dsx.2025.103220
125. Roles D. Support for community health workers to increase health access and to reduce health inequities. *Policy statement database*. 2009.
126. Liu Y, Luu SL, Evans M. Peer Support. In: *Chronic Illness Care: Principles and Practice*. 2023:113.
127. Fisher EB, Coufal MM, Parada H, et al. Peer support in health care and prevention: cultural, organizational, and dissemination issues. *Annu Rev Public Health*. 2014;35:363–383. doi:10.1146/annurev-publhealth-032013-182450
128. Powers B, Bucher A. An economic impact model for estimating the value to health systems of a digital intervention for diabetes primary care: development and usefulness study. *JMIR Form Res*. 2022;6(9):e37745. doi:10.2196/37745
129. Cha J, Cha ED, Yoo EH, Song H. Modeling ROI in chronic disease management: a simulation-based framework integrating patient adherence and policy timing. *BMC Public Health*. 2025;25(1):4270. doi:10.1186/s12889-025-25279-3