# Integrated Interventions to Bridge Medical and Social Care for People Living with Diabetes

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Social drivers of health impact health outcomes for patients with diabetes, and are areas of interest to health systems, researchers, and policymakers. To improve population health and health outcomes, organizations are integrating medical and social care, collaborating with community partners, and seeking sustainable financing with payors. We summarize promising examples of integrated medical and social care from the Merck Foundation *Bridging the Gap: Reducing Disparities in Diabetes Care* initiative. The initiative funded eight organizations to implement and evaluate integrated medical and social care models, aiming to build a value case for services that are traditionally not eligible for reimbursement (e.g., community health workers, food prescriptions, patient navigation). This article summarizes promising examples and future opportunities for integrated medical and social care across three themes: (1) primary care transformation (e.g., social risk stratification) and workforce capacity (e.g., lay health worker interventions), (2) addressing individual social needs *and* structural changes, and (3) payment reform. Integrated medical and social care that advances health equity requires a significant paradigm shift in healthcare financing and delivery.

*KEYWORDS:* diabetes; social care; payment reform; health equity.

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Diabetes is a model chronic disease for understanding the root causes of health disparities and potential solutions.[1,2] Racial and ethnic minority populations experience a higher burden of diabetes-related complications and are less likely to receive recommended diabetes preventive care (e.g., retinal disease screening). [3–6] To improve health outcomes, both medical and social needs must be addressed, at individual and structural levels.[7–8] The National Academies of Sciences, Engineering, and Medicine describe their "5A" framework of key activities to support integrating social care into medical care, including the following: *awareness* of individual or community-level needs, *adjustment* to accommodate social needs, *assistance* with connecting patients to community-based resources, *alignment* of health care system investments with existing community assets, and *advocacy* from the health care sector to promote policies that address social needs.[7] Given that specific unmet social needs (e.g., food insecurity) can negatively impact diabetes outcomes, many patients will benefit from combined medical and social care (e.g., diabetes education paired with food distribution for patients with food insecurity) to proactively support their diabetes self-management. Advocating for policy changes at the structural level will support equitable living conditions (e.g., living wage, access to health insurance, access to Supplemental Nutrition Assistance Program (SNAP) benefits) and reduce persistent unmet social needs.

In 2009, the Merck Foundation created the *Alliance to Reduce Disparities in Diabetes*. Five grantee communities aimed to reduce diabetes disparities by multi-level interventions at patient, provider, and systems levels.[9,10] The Alliance found that these multi-level interventions based on the Chronic Care Model could improve the care, self-management, and outcomes of disadvantaged populations and reduce disparities.[11,12] In 2016 the Merck Foundation developed a successor initiative, *Bridging the Gap: Reducing Disparities in Diabetes Care*, and housed the National Program Office at the University of Chicago. Compared to the Alliance, the new initiative emphasized addressing social drivers of health in collaboration with community partners and developing sustainable financial models with payors. We have previously described the eight grantees, their interventions, and their payor environments.[13] Individual papers in this supplement highlight how the implementation of integrated medical and social care can improve both population health and individual patient outcomes [14–20]. This paper describes promising examples of eight innovative grantee organizations and payment reform opportunities that may further support integrated medical and social care.

## THE BRIDGING THE GAP: REDUCING DISPARITIES IN DIABETES CARE INITIATIVE

In 2016, the Merck Foundation released a call for proposals (CFP) for an initiative that "aims to improve access to high-

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quality diabetes care and reduce health disparities for vulnerable and underserved populations with type 2 diabetes in the United States." The CFP noted the importance of developing interventions across the healthcare ecosystem and the community ecosystem through cross-sector collaborations to address medical and social determinants of health, improve population health, and reduce health disparities (Fig. 1). Applicants described plans to implement coordinated, team-based care and transform primary care, engage in meaningful partnerships with the community and other stakeholders, implement intersectoral collaborations (e.g., food, housing, social service agencies) that address medical and social needs, and plan for sustainability of the interventions. They were encouraged to involve public and private payors as key stakeholders in their initiatives. Suggested core areas of primary care transformation included patient empanelment to specific providers and teams, risk-stratifying patients and tailoring care for medical and social needs, care coordination, and leveraging health information technology (HIT).

## PROMISING EXAMPLES AND FUTURE OPPORTUNITIES FOR INTEGRATED MEDICAL AND SOCIAL CARE

We offer promising examples and future opportunities for integrated medical and social care informed by our eight grantee organizations across three themes: (1) primary care transformation and workforce capacity, (2) addressing individual social needs *and* structural changes, and (3) payment reform (Table 1).

### Primary Care Transformation and Workforce Capacity

***Promising Examples from Grantees.*** Across grantee organizations, transformation to integrated medical and social care relied on core activities including complex care management, risk stratification to identify patients with different levels of needs, tailoring services according to needs, and implementing HIT to support real-time care coordination and communication. Risk stratification helped direct more resources and support to patients with greater complexity and provide early intervention to those at risk of poor health outcomes.[21] For example, Trenton Health Team uses risk stratification to identify high-risk community members (e.g., recent hospital utilization) with diabetes through a local Health Information Exchange, and offers community-based care management to address individual medical and social needs.[14] Local partnerships of healthcare, public health, and social services can facilitate this care transformation.[14,15,17] For example, the Minneapolis Health Department (MHD) has supported diabetes care transformation with federally qualified health centers (FQHCs) by piloting new HIT platforms, facilitating partnerships with community agencies, convening a learning collaborative of FQHCs, and providing upfront funding for new roles in care teams (e.g., diabetes educators and community health workers).[10] Upfront funding allowed FQHCs to rapidly implement new services to support diabetes self-management while overcoming barriers or delays to reimbursement in the fee-for-service payment context.

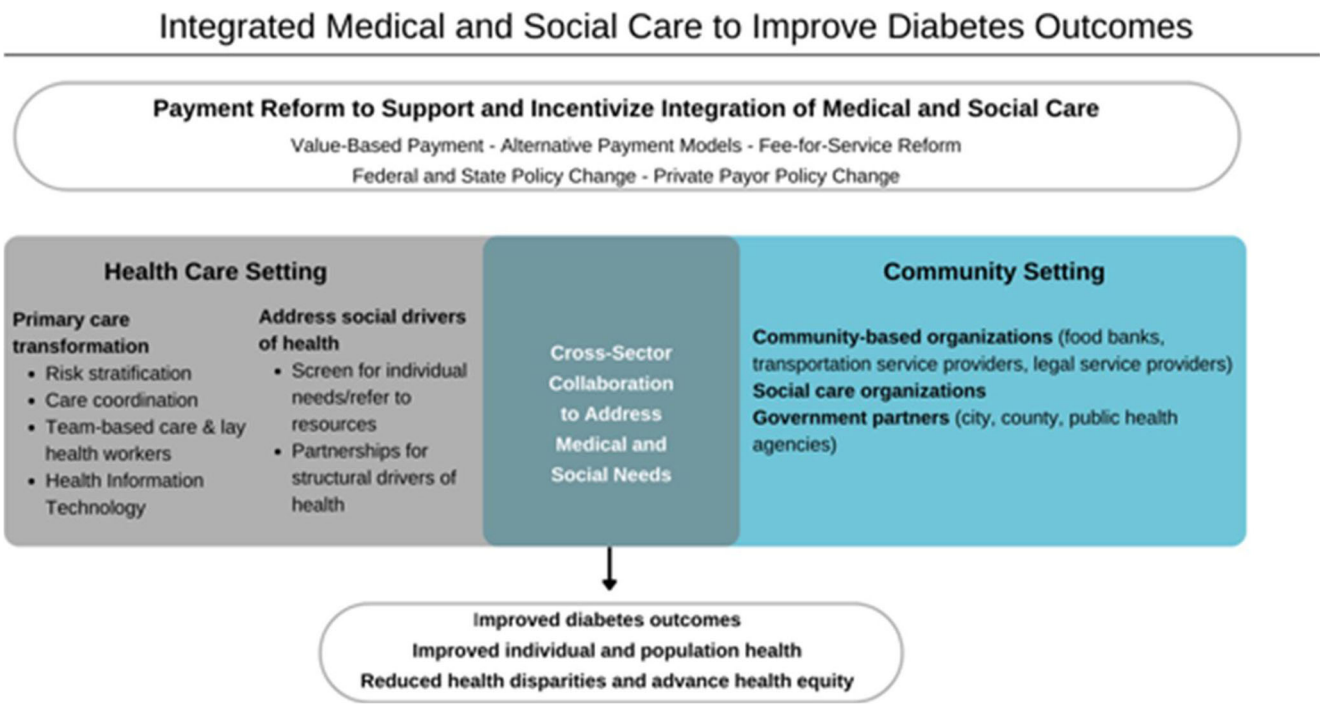


**Figure 1 Integrated medical and social care to improve diabetes outcomes. Note: Developed by the *Bridging the Gap: Reducing Disparities in Diabetes Care* National Program Office at the University of Chicago.**

**Table 1 Payment Reform Opportunities to Bridge Medical and Social Care**

| Opportunity | Example |
|---|---|
| Engage payors in collaborative funding models | • West Virginia FQHCs apply grant funding to fund CHW services, and concomitantly engage Medicaid MCOs to validate the model and establish an equitable payment model for high-risk care coordination for patients with chronic conditions.[23] |
| Pursue innovative opportunities to pilot and evaluate payment for non-medical services with Medicaid Managed Care Organizations (MCOs) | • Horizon Blue Cross Blue Shield of New Jersey (BCBSNJ) launched Horizon Neighbors in Health (HNIH) in April 2020, the state's largest ever program to provide direct support to high-risk beneficiaries via community members who address social determinants of health. Trenton Health Team is one participating HNIH site.[39]<br>• The HNIH model emphasizes care coordination across all systems, linkage to community resources, access to clinical outcomes and financial data, and analytics-based insights to improve program reach and impact. CHWs address social needs and services that typically fall outside of the traditional healthcare delivery model.[39]<br>• Financial stability, food, and basic healthcare needs are the most prevalent needs identified among program participants. The program also pilots the use of available Horizon BCBSNJ mitigation funds to help secure certain items or services not available in the community (e.g., diapers, utility assistance).[39] |
| Intentionally design state policy to support integrated medical and social care | • The Maryland all-payer, total cost of care model has encouraged healthcare organizations to transform care and address the medical and social needs of high-risk patient populations.<br>• Global budgets in Maryland provide the flexibility and financial incentives to develop and sustain innovative care models (e.g., Center for Clinical Resources at UPMC Western Maryland), as hospitals focus on value over volume.[15] |
| Align federal and state payment policy to support integrated social and medical care | • The Center for Medicare and Medicaid Innovation's recent Strategy Refresh lists "advance health equity" and "support care innovation" among strategic objectives with features "such as upfront payments, social risk adjustment, benchmark considerations, and payment incentives for reducing disparities or screening for SDoH and coordinating with community-based organizations to address social needs."[36] |
| Expand value-based payment structure to advance health equity | • Authorize value-based payments that provide flexibility to pay for non-medical services, including performance incentives (e.g., pay for reducing disparities) and upfront payment (e.g., capitation, global payment, per member per month).[33,45,46] |
| Modify and leverage fee-for-service reimbursement to support integrated medical and social care | • Physicians and other qualified health care providers are eligible to bill for Medicare Chronic Care Management Services codes.[44] These codes also allow for other members of the care team to provide services under the billing providers' general supervision.[44]<br>• Medicare could expand billing codes with specific inclusion of other health care workers (e.g., nurses and social workers) to deliver billable services that are typically difficult to reimburse such as care coordination, patient assessment, and other preventive care.[7,40] |
| Simplify or modify complexity of regulatory, billing, and payment issues that hinder opportunities to deliver medical and social care | • Organizations should engage with state agencies to clarify ways to operationalize CHW services with available Medicaid reimbursement mechanisms, navigate compliance with regulation, and streamline billing processes.<br>• Collaboration across healthcare, payor, and other social care organizations can help identify barriers and generate solutions for financing, billing, and sustainability of CHW services.[16]<br>• Payment options outside of fee-for-service (e.g., global budgets, capitated payments) should continue to be tested and implemented; these payments may offer greater flexibility for CHWs in a range of care delivery models. |

***Abbreviations**: CHW community health worker, FQHC federally qualified health center, SDoH social determinants of health*

Bolstering and transforming workforce capacity of primary care teams is critical to delivering integrated medical and social care.[7,22] Seven of eight grantee organizations employed lay health workers (e.g., patient navigator, health educator, community health worker).[13,14,18,23] At Roots Community Health Center, navigators provide self-management education and support, initiate and track medical and social needs referrals, engage in outreach work, and accompany patients through medical and social care organizations.[24] In addition, organizations need the flexibility to tailor primary care transformation activities and services to the structure and size of their organizations (e.g., FQHC, critical access hospital, community health collaborative), geographies (e.g., frontier, rural, urban), populations (e.g., immigrant, rural older adult), and community partners (e.g., transportation, food banks, legal services).[13]

***Future Opportunities.*** Healthcare organizations should design and implement diabetes care models that risk stratify patients and tailor care for their medical and social needs. They should implement team-based care models that include lay health workers and are individualized for their specific organizational, community, and patient context. Health care organizations need aligned policy and payment structures to

support care transformation and expand workforce capacity. Although the use of CHWs is an evidence-based strategy to improve health outcomes among marginalized patient populations, widespread implementation of CHW services has not been fully realized.[25,26] Only 21 states currently allow for Medicaid payment of CHW services and the scope of services covered can be limited (e.g., Minnesota only covers disease-specific patient education).[27] Medicaid reimbursement for CHW services should be authorized by additional states, drawing upon different mechanisms, including the following: (1) Medicaid payments authorized under the state plan for CHW services under the supervision of a licensed provider; (2) requirements for CHWs in MCO contracts (e.g., MCOs in Michigan are required to support implementation of CHW interventions that address social determinants of health, promote prevention, offer health education); (3) allowance or requirement for CHWs to be part of interdisciplinary teams (e.g., as part of programs for beneficiaries with specific health needs); (4) MCOs, accountable care organizations, or other care networks employ CHWs or arrange for CHW services for members (e.g., may align with reaching goals for incentive payments).[27]

## Social Drivers of Health: Address Individual Social Needs and Advocate for Structural Changes

***Promising Examples from Grantees.*** Many patients have chronically unmet needs for food, medication, safe and affordable housing, and transportation to appointments. Risk for material and financial insecurity during the COVID-19 pandemic exacerbated these needs.[28] Healthcare organizations can support patients by screening for social needs (e.g., transportation barriers) and offering short-term resources (e.g., transportation vouchers, virtual visits, or home visits).[29] In Portland, OR, Providence Health & Services integrates a food distribution program with nutrition education and navigation services at a one-stop location, the Providence Milwaukie Community Teaching Kitchen.[20] The Community Teaching Kitchen adapted services during the pandemic to conduct virtual social needs screening (e.g., food insecurity), prepare food boxes according to patients' needs (e.g., barriers to transportation, lack of food storage or access to kitchen, insecure housing), and provide a hybrid in-person/virtual community resource desk where patients access support via their preferred contact method.[20]

Healthcare organizations should advocate for more equitable conditions and structures. For example, La Clínica del Pueblo, an FQHC serving primarily Spanish-speaking immigrants, collects patient testimony and advocates with other community-based organizations for equitable changes to recertification and sustained access to public health insurance in the District of Columbia (e.g., shift from 6-month in-person eligibility recertification to 12-month renewal process that mimics Medicaid).[19,30] Healthcare organizations should also be part of coalitions to address structural social drivers of inequities in the community. In New Jersey, Trenton Health Team convenes the Trenton Food Stakeholders group to address structural, logistical, and policy-related issues that impact food access and distribution.[29] This cross-sector group brings together the city of Trenton's Department of Health and Human Services, New Jersey SNAP-Ed, social service providers, healthcare organizations, and local farmers to share resources, identify gaps in food access, and undertake long-term planning to address food insecurity in the community.

***Future Opportunities.*** Healthcare organizations should identify unmet social needs and offer short-term assistance to address individual needs, and also collaborate with community and government partners to address the root structural causes of unmet social needs.[7,31] CMS recently announced plans to adopt health equity–focused measures in the Inpatient Quality Reporting Program, including two measures that capture screening and identification of patient-level, health-related social needs (e.g., food insecurity, housing instability, transportation needs, utility difficulties, interpersonal safety).[32] These screening activities may be bolstered in the future by CMS implementing measures focused on connecting patients to needed resources or services. In addition, the CMS ACO Realizing Equity, Access, and Community Health (REACH) program requires ACOs to collect patient-reported SDOH and also implement a health equity plan to reduce disparities.[33]

## Payment Reform

***Promising Examples from Grantees.*** Many health care organizations include staff who have the necessary vision, motivation, and innovation to improve health outcomes and advance health equity. However, lack of payment for non-medical services (e.g., care coordination) and social care restricts their efforts.[9] Organizations often adopt integrated medical and social care models with uncertainty about sustainable funding sources. Too often, organizations piece together disparate sources of funding due to lack of widespread and reliable reimbursement mechanisms for integrated medical and social care. For example, the FQHC La Clínica del Pueblo serves many immigrant patients excluded from federally funded programs. Grant funding and contracts with local government agencies are often required to build, modify, and sustain robust models of integrated medical and social care.[34] Organizations need greater flexibility to support program costs. While many markets are shifting from fee-for-service to value-based payment and other alternative payment models, many of the newer payment models still constrain opportunities to sustain and scale integrated medical and social care.[35]

Healthcare organizations can engage payors in collaborative models of funding. For example, researchers at Marshall University have piloted innovative CHW funding models via a graduated scale of collaborative funding where grant funding supports the startup costs of the CHWs' salary and travel, and

payors (e.g., Medicaid MCOs) agree to share savings with the FQHCs, providing a funding stream for sustained CHW services.[24] Value-based payment and alternative payment models should use multiple levers including flexible upfront payments (e.g., capitation, global payment, per member per month) that proactively support team-based care and care coordination services, and performance incentives (e.g., payments for reducing disparities) to support and incentivize integrated medical and social care models.[13,35,36]

Medicaid managed care organizations (MCOs) have the potential to pilot new models of integrated care and implement and evaluate payment mechanisms for services that have traditionally not been eligible for reimbursement.[37] Promising innovations from Medicaid MCOs include piloting and evaluating payment for non-medical services (e.g., community health workers, tailored meals, other food distribution).[38] In New Jersey, a regional Medicaid payor partners with health care and community-based organizations to provide direct support to high-risk beneficiaries through a model that emphasizes care coordination across all systems, linkage to community resources, access to clinical outcomes and financial data, and analytics-based insights to improve program reach and impact.[39]

Finally, when state payment policy is intentionally designed to incentivize population health management and support infrastructure for integrated medical and social care, health care organizations can mobilize the necessary resources to care for patients with complex medical and social needs. State-level policy changes in Maryland to flexible global budgets incentivized health systems like UPMC Western Maryland to launch outpatient interventions to prevent costly hospitalizations.[15] These interventions identify and address patients' unmet social needs, coordinate care with community providers and resources, and extend care beyond the walls of the health system. For example, UPMC Western Maryland created the Center for Clinical Resources (CCR) that improved patient-reported outcomes, glycemic control, and hospital utilization for high-risk patients with diabetes.[15]

***Future Opportunities.*** The Centers for Medicare and Medicaid Services (CMS) should align federal and state payment policy to support integrated medical and social care.[40,41] The Center for Medicare and Medicaid Innovation's (CMMI) recent Strategy Refresh lists "advance health equity" and "support care innovation" as two of its five strategic objectives.[42] Our program's experience supports CMMI's proposed strategic approach to encourage safety net and rural providers to participate in value-based payment models, with features "such as upfront payments, social risk adjustment, benchmark considerations, and payment incentives for reducing disparities or screening for SDoH and coordinating with community-based organizations to address social needs."[42] Our experience also is consistent with the CMS Health Care Payment Learning and Action Network's updated definition of accountable care that highlights equity and the provision of high-value care to all.[43]

Federal and state governments should implement practical solutions to address barriers that hinder delivery of health-related non-medical services. First, federal and state governments can broaden the definition of medical care to facilitate financing for integration and provision of some social care services in health care.[7] Medicaid presents opportunities for flexibility to provide social care services in health care through both state plan definitions (consensus between states and CMS on what populations and services are covered in each state) and managed care authorities.[7] CMS could also define social care with clear language that enables Medicaid to cover key services and healthcare worker roles (e.g., nurses, social workers) critical for addressing patients' social needs.[7,40]

Value-based payment can provide flexible payment options that support and incentivize coordinated team-based care, primary and preventive care, and health equity.[38] However, until flexible value-based payments are more accessible to health care organizations, modifying existing fee-for-service reimbursement can allow a broader range of health care workers to deliver billable services that address social barriers to health. For example, physicians and other qualified health care providers are eligible to bill for Medicare Chronic Care Management Services codes.[44] These codes also allow for other members of the care team to provide services under the billing providers' general supervision.[44] Medicare could expand billing codes with specific inclusion of other health care workers (e.g., nurses and social workers) to deliver billable services that are typically difficult to reimburse such as care coordination, patient assessment, and other preventive care.[7,34]

## CONCLUSIONS

It is time for a fundamental paradigm shift for healthcare financing and delivery to advance health equity. Too often we require that healthcare interventions for marginalized populations save costs or be cost neutral, rather than increase value. We should invest more in health promotion, public health, primary care, and social care. Our current healthcare delivery and financing system undervalues the time and resources required to address the medical and social needs of patients experiencing health inequities. Populations that have faced years of underinvestment in their health, communities, and well-being will require investments that will have both short- and long-term horizons for payoffs in health outcomes and efficiency of expenditures. Metrics of success for return on investment for advancing health equity should take account of historic underinvestment, the time horizon for addressing structural social drivers of inequities, and an explicit ethical frame that includes distributive justice.

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