Driving Dual Returns: How Mitigation of Social Determinants of Health Optimizes Value-Based Care Financial Models

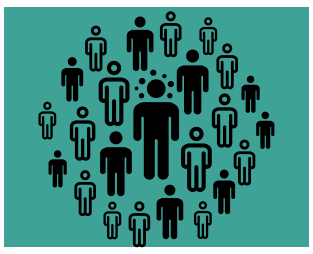
An Analysis by Cian Robinson. August 2025

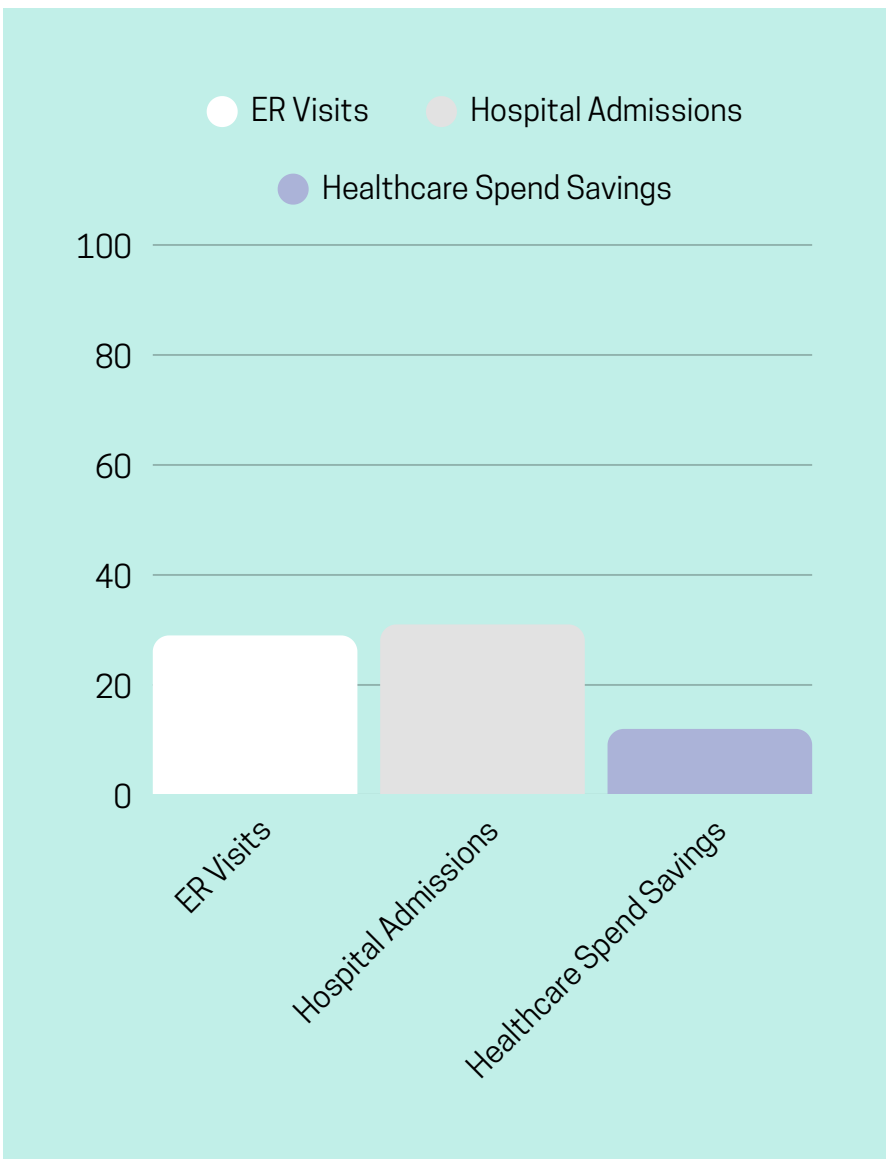
Overview

Non-medical factors such as housing, food, education, and social or community context, drive 30–50% of outcomes (and sometimes over 80%). Ignoring SDOH costs the U.S. an estimated $309B annually. Value-Based Care (VBC) models tie payment to quality and outcomes, making SDOH integration a strategic necessity.

Unlike Fee-for-Service systems, which reward volume of care, VBC ties reimbursement to outcomes, making investments in SDOH not just socially responsible but strategically essential.

Mitigating SDOH is not an optional social good but a financial and strategic necessity in Value-Based Care. It aligns economic sustainability with healthcare's broader mission, creating a system that is more equitable, efficient, and resilient.





Enablers of Success

- Data & Tech Advancement: EHR integration, predictive analytics, AI, Telehealth
- Collaboration with community-based organizations (CBOs)
- CMS "in lieu of" services, Z codes, *Section 1115* waivers

Challenges

- Fragmented data (85% lack community-level SDOH data)
- Limited reimbursement for non-medical services
- Operational resistance & workflow inefficiencies
- Gaps in standardized outcomes measurement

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Executive Summary

This report provides a comprehensive analysis demonstrating how the mitigation of Social Determinants of Health (SDOH) can yield significant dual returns—both monetary and mission-based—within a Value-Based Care (VBC) financial model. By shifting from a reactive, volume-driven Fee-for-Service (FFS) approach to a proactive, outcomes-focused VBC framework, healthcare stakeholders are increasingly incentivized to address the non-medical factors that profoundly impact health outcomes and costs. Evidence unequivocally shows that investments in SDOH interventions, such as housing and food security programs, lead to substantial reductions in high-cost healthcare utilization (e.g., emergency department visits and hospitalizations), generating a quantifiable return on investment. Beyond financial gains, these initiatives are crucial for advancing health equity, improving patient quality of life, and fostering community well-being, aligning healthcare's financial sustainability with its fundamental societal mission. Successful integration necessitates leveraging advanced data analytics, fostering robust cross-sector partnerships, and evolving policy and reimbursement mechanisms to support holistic, preventive care. Realizing these dual returns is essential for creating a more equitable, efficient, and sustainable healthcare system.

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1. Introduction: The Strategic Imperative of SDOH in Value-Based Care

This section establishes the foundational understanding of Social Determinants of Health and Value-Based Care, highlighting their inherent alignment as a strategic imperative for modern healthcare.

- **1.1. Defining Social Determinants of Health (SDOH) and their profound impact on health outcomes.**
  Social Determinants of Health (SDOH) refer to the non-medical factors that significantly influence an individual's health status, overall functioning, quality of life, and associated health risks. These critical elements encompass the conditions within the environments where individuals are born, grow, live, learn, work, play, worship, and age.[1] Organizations such as the Centers for Disease Control and

Prevention (CDC) and the Healthy People 2030 initiative, drawing from definitions established by the World Health Organization (WHO), categorize SDOH into five primary domains: Economic Stability, Education Access and Quality, Health Care Access and Quality, Neighborhood and Built Environment, and Social and Community Context.[1]

The influence of SDOH is extensive and often disproportionate across different populations. Research indicates that these social and economic factors are responsible for influencing a substantial portion of an individual's health outcomes, ranging from 30% to 50% [3] and even exceeding 80% in some analyses, which is considerably greater than the impact attributed to clinical factors alone.[3] For example, studies have linked factors such as low educational attainment, racial segregation, individual-level poverty, and income inequality to hundreds of thousands of deaths annually in the United States.[5] Furthermore, population-level health inequalities, largely exacerbated by disparities in SDOH, contribute to an estimated $309 billion in annual economic losses.[5] This quantitative comparison fundamentally redefines the understanding of health, positioning SDOH as the central, most impactful driver of health outcomes. For healthcare executives and policymakers, this implies that focusing solely on clinical interventions, without addressing SDOH, is inherently inefficient and will fail to achieve optimal population health or cost control. It underscores that true health improvement requires a broader, more integrated approach that extends beyond the clinic walls.

- **1.2. Understanding Value-Based Care (VBC) and its distinction from Fee-for-Service (FFS).**
  Value-Based Care (VBC) represents a transformative shift in healthcare payment and delivery paradigms. In contrast to the traditional Fee-for-Service (FFS) model, which compensates providers based on the volume of services delivered—such as the number of doctor visits or medical procedures—VBC places emphasis on the quality, effectiveness, and overall patient outcomes of treatments.[7] Under VBC arrangements, providers receive payments that are directly linked to performance metrics, patient health scores, and demonstrated cost reductions, thereby incentivizing preventive care, comprehensive care coordination, and sustained improvements in long-term health.[7]

  Common VBC models include Accountable Care Organizations (ACOs), which coordinate care for patient populations; Bundled Payments, which cover all services for a specific episode of care; Patient-Centered Medical Homes (PCMH), which

focus on primary care coordination; Capitated Payments, providing a fixed sum per patient for a defined period; and Performance-Based Payments, offering bonuses for achieving predetermined benchmarks.[10] Conversely, the FFS model has faced criticism for its tendency to inflate healthcare costs and contribute to fragmented or even medically unnecessary care, with some analyses indicating that a significant portion of medical services provided are deemed unnecessary.[8] This establishes a direct causal link: the financial structure of VBC inherently encourages the very proactive, holistic interventions that SDOH mitigation entails. This represents a critical distinction from FFS, which provides no such financial encouragement. For strategic investors and policymakers, this highlights that VBC is not merely a different payment method, but a framework that naturally aligns with and financially rewards investments in upstream social factors.

- **1.3. The alignment: How addressing SDOH is fundamental to VBC success.**
  The ongoing transition to Value-Based Care fundamentally compels healthcare providers to expand their focus beyond merely treating specific diseases. Instead, they are encouraged to address unmet social needs, enhance overall patient outcomes, and deliver greater value to both patients and payers.[6] This comprehensive approach is a core element of the Centers for Medicare & Medicaid Services (CMS) "triple aim" strategy, which seeks to simultaneously improve health and patient outcomes while effectively reducing healthcare costs.[12]
  CMS's ambitious objective to enroll all Medicare and Medicaid beneficiaries in value-based care plans by 2030 underscores the growing recognition that Social Determinants of Health are indispensable to achieving desired health outcomes.[12] By proactively addressing SDOH, healthcare systems can shift from a reactive paradigm—where illnesses are treated after they manifest—to a preventive one, where the root causes of poor health are mitigated. This proactive stance is essential for the sustained success of VBC models.[11] This positions SDOH mitigation not as an optional add-on or a mere social responsibility, but as a strategic necessity for any healthcare organization operating within or transitioning to a VBC model. Without effectively addressing SDOH, VBC initiatives will struggle to achieve their full financial and quality potential, potentially leading to financial underperformance and failure to meet benchmarks. This emphasizes that investment in SDOH is a core component of a successful VBC strategy.

- **1.4. Key Differences: Fee-for-Service vs. Value-Based Care**
  The fundamental divergence between Fee-for-Service (FFS) and Value-Based Care (VBC) models profoundly impacts incentives, patient care, and financial outcomes within the healthcare system. Understanding these distinctions is crucial for appreciating why SDOH integration is a natural fit for VBC.

Criterion	Fee-for-Service (FFS)	Value-Based Care (VBC)
Focus	Quantity of services delivered	Quality and outcomes of care
Payment Structure	Per-service reimbursement	Performance-based, bundled, or capitated payments
Financial Risk to Provider	Low (shifted to payer/patient)	Higher (tied to outcomes and cost efficiency)
Primary Incentive	Maximize volume of services	Maximize value, improve patient health, reduce unnecessary costs
Patient Impact	Higher costs, potential for fragmented or unnecessary care	Lower costs, coordinated care, improved long-term outcomes
Role of Prevention	Reactive (treats illness after it occurs)	Proactive (emphasizes wellness and early intervention)
Administrative Complexity	High (detailed claims for each service)	Lower (bundled payments, shared savings, focus on outcomes)

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2. The Financial Case: Quantifying Monetary Returns from SDOH Mitigation

This section provides compelling evidence and quantifiable data demonstrating the monetary returns derived from investing in SDOH mitigation within a VBC framework.

- **2.1. SDOH as Key Predictors of Healthcare Costs and Utilization.**
  Social Determinants of Health are not merely correlated with health outcomes; they serve as statistically significant predictors of future healthcare costs and utilization patterns.[13] For instance, studies examining adult Medicaid beneficiaries have revealed that individuals categorized into higher social risk classes—defined by factors such as food insecurity, housing instability, or lack of homeownership—exhibit a substantially higher future burden of morbidity and increased healthcare spending. This trend persists even when controlling for their past health status and previous healthcare expenditures, underscoring the independent predictive power of SDOH.[13]

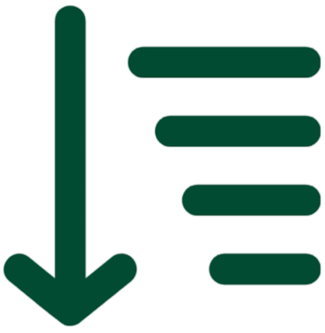
  Similarly, an individual's residence in a socially disadvantaged neighborhood is directly associated with an elevated likelihood of becoming a high-cost healthcare

utilizer. This association is particularly pronounced among older commercially insured adults and beneficiaries of Medicare Advantage plans.[14] This predictive capability means that by systematically identifying and addressing SDOH, healthcare systems can anticipate and proactively manage populations at elevated risk of incurring significant future costs. The ability to identify patients with specific SDOH risks *before* they become high-cost utilizers enables the implementation of targeted interventions. This highlights that SDOH data is not just descriptive but actionable. In a VBC model, where financial success is intrinsically linked to managing costs and improving outcomes, leveraging SDOH data for predictive analytics becomes a powerful tool for cost avoidance. It facilitates a strategic shift from reactive treatment of expensive conditions to proactive, preventative care, thereby directly impacting monetary returns by reducing future financial burdens.

- **2.2. Evidence of Cost Reductions: Impact on Hospitalizations, Emergency Department Visits, and Chronic Disease Management.**
  An integrated approach to addressing patients' social and medical needs has consistently demonstrated its capacity to reduce the utilization of expensive healthcare services. This includes significant decreases in emergency department (ED) visits, hospitalizations, and long-term nursing home stays.[15]

  Quantifiable Reductions: For housing interventions specifically targeting individuals experiencing homelessness or those at risk, studies have reported notable reductions: ED visit rates decreased by 14% to 54% (with a median reduction of 29%), hospital admission rates fell by 15% to 42% (median 31%), and the number of hospital days was reduced by 29% to 43%.15 One particular study also observed a 14% shorter hospital length of stay.15 Beyond acute care, these interventions have led to substantial reductions in skilled nursing facility and long-term care days, generating considerable savings for programs like Medicare and Medicaid.16

  Overall healthcare expenditures have shown reductions, with one example indicating a 12% decrease (approximately $50 per member per month) in the year following intervention.16 More granular data reveals specific reductions in Department of Health Services costs, including 76% for inpatient services, 66% for emergency services, and 59% for crisis stabilization.16

  Chronic Disease Management: Value-Based Care models, particularly when enhanced with AI-driven analytics, are strategically designed to prioritize preventive care and proactively manage the risks associated

with chronic diseases. This approach effectively reduces cost burdens by averting expensive interventions that become necessary when diseases are diagnosed at later stages. Ultimately, this proactive stance helps to slow the progression of chronic diseases, contributing to long-term health and financial benefits.[11] The consistent and substantial reductions in high-cost acute care utilization (ED visits, hospitalizations) across multiple studies demonstrate a clear pattern of effectiveness. This is not merely about individual patient savings; it reflects a broader optimization of healthcare resource allocation. In a VBC framework, where providers are held accountable for costs and outcomes, these reductions translate directly into financial gains through shared savings, avoided penalties, and improved overall financial performance. This confirms that SDOH interventions contribute to the systemic efficiency of the healthcare system, making it more financially viable and sustainable in the long term.

- **2.3. Quantifiable Return on Investment (ROI) for SDOH Interventions.** Direct evidence of financial returns from investments in Social Determinants of Health is increasingly available, building a strong business case for their integration into Value-Based Care. A comprehensive review of interventions focused on addressing food and housing insecurity revealed consistently positive average returns on investment (ROI).[17]

  Specifically, **food-insecurity programs** demonstrated an average ROI of 85%, with individual program returns ranging from 1% to an impressive 287% (excluding one outlier with a negative ROI).[17] Similarly, **housing-insecurity programs** showed an average ROI of 50%, with positive returns spanning from 5% to 224% (excluding one outlier with a negative ROI).[17]

  Further studies corroborate these findings, providing additional compelling data. For instance, a community health worker intervention known as IMPaCT, aimed at disadvantaged individuals, yielded a remarkable $2.47 return for every dollar invested for an average Medicaid payer within a single fiscal year. This significant return was primarily driven by substantial inpatient cost savings.[19] Another care coordination program designed to address health-related social needs projected an ROI of 172% based on reduced billed charges. Even when a more conservative estimate was applied, accounting for a hypothetical 50% cost-to-charge ratio, the program still demonstrated an attractive ROI of 36%.[20] The explicit ROI percentages are direct, quantifiable answers to the "monetary returns" aspect of the query. They demonstrate that these interventions are not merely expenses but generate positive financial returns. This transforms SDOH initiatives from a perceived "charity" or "social good" into a financially sound

strategic investment. For healthcare executives and payers, this provides robust evidence needed to justify resource allocation, secure funding, and make a compelling business case for integrating SDOH mitigation into their financial models. It underscores that addressing social needs can be a financially prudent decision that directly contributes to the bottom line in a VBC environment.

- **2.4. Case Studies: Demonstrating Financial Benefits for Health Systems and Payers.**
  Real-world examples vividly illustrate the tangible financial benefits realized by healthcare organizations that actively integrate Social Determinants of Health mitigation into their Value-Based Care strategies:
  - **Geisinger Health System:** In 2023, Geisinger, a prominent regional healthcare organization, reported earning over $45 million in total annual financial incentives through its VBC arrangements. This success was achieved by strategically incorporating environmental and regional factors, which are key SDOH, into its care models. This approach allowed Geisinger to tailor care to the unique demographics and socioeconomic challenges prevalent within the communities it serves.[21]
  - **Innovative Healthcare Collaborative of Indiana (IHCI):** This collaborative demonstrated significant financial improvements by adopting a data integration solution. By gaining timely access to clinical, financial, and operational data from multiple sources, IHCI achieved a remarkable $28.3 million reduction in costs, alongside improved inpatient utilization and reduced readmissions, all within a single year.[22] While this case study is not exclusively focused on SDOH, it powerfully illustrates the financial efficacy of data-driven, coordinated care, which is a fundamental prerequisite for successful SDOH interventions.
  - **Carle Health:** This organization successfully leveraged population health management tools to mitigate financial risks effectively. By proactively identifying high-risk patients—a group often characterized by significant SDOH challenges—and implementing personalized care plans, Carle Health managed to reduce unnecessary spending and improve patient outcomes. This strategic approach directly contributed to maximizing shared savings under their VBC contracts.[22] The presented case studies highlight financial successes across diverse types of healthcare entities—from large integrated health systems to smaller collaboratives and community-based programs. This addresses a critical concern for decision-makers: whether these financial benefits are isolated or broadly achievable. By demonstrating replicability and scalability across diverse organizational structures and patient populations, these case studies provide compelling evidence that the financial returns from SDOH integration are not theoretical but are being realized in practice. This further strengthens the business case for widespread adoption within the VBC

landscape.

- **2.5. Impact of SDOH on Healthcare Utilization and Costs**
  The following table summarizes the quantifiable impact of various SDOH interventions on healthcare utilization and costs, drawing from multiple studies.

SDOH Intervention Type	Specific Outcome Metric	Quantified Impact	Source Snippet ID(s)
Housing Interventions (Homeless/At-Risk)	% Reduction in ED Visits	Median 29% (range 14-54%)	15
Housing Interventions (Homeless/At-Risk)	% Reduction in Hospital Admissions	Median 31% (range 15-42%)	15
Housing Interventions (Homeless/At-Risk)	% Reduction in Hospital Days	29% to 43%	15
Housing Interventions (Homeless/At-Risk)	Shorter Hospital Length of Stay	14% shorter	15
Housing Interventions (Elderly)	Decreased Skilled Nursing Facility/LTC Days	Significant decreases	16
General SDOH Interventions	Overall Healthcare Expenditures Reduction	12% less (approx. $50 PMPM)	16
Specific SDOH Interventions	Inpatient Services Cost Reduction	76% reduction	16
Specific SDOH Interventions	Emergency Services Cost Reduction	66% reduction	16
Specific SDOH Interventions	Crisis Stabilization Cost Reduction	59% reduction	16
Housing & Other Services	Average Annual Cost Savings per Person	$6,307 (chronically homeless: $9,809)	16
Housing & Other Services	Average Net Savings per Person per Year	$29,564	16

- **2.6. Quantified Return on Investment (ROI) for Select SDOH Interventions**
  The following table presents explicit Return on Investment (ROI) figures for various SDOH interventions, highlighting their financial viability.

Intervention Type	Average ROI	ROI Range (if applicable)	Source Snippet ID(s)
Food Insecurity Programs	85%	1% to 287% (excluding outlier)	17
Housing Insecurity Programs	50%	5% to 224% (excluding outlier)	17
Community Health Worker Intervention (IMPaCT)	$2.47 per $1 invested	Not specified	19
Care Coordination Program (HCAN)	172% (based on billed charges)	36% (with 50% cost-to-charge ratio)	20

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3. The Mission-Driven Imperative: Advancing Health Equity and Community Well-being

This section articulates the profound societal and ethical returns generated by addressing SDOH within a VBC framework, emphasizing their role in fulfilling healthcare's broader mission.

- **3.1. Improving Patient Outcomes and Quality of Life through Holistic Care.** Addressing Social Determinants of Health directly enhances individual health outcomes and overall quality of life, moving beyond the mere treatment of disease to fostering true well-being.[1] Value-based care models, with their inherent focus on patient outcomes and preventive strategies, naturally support a holistic approach that considers the entirety of a patient's health, rather than just isolated clinical conditions.[9] The core mission of healthcare is to improve health. While clinical care treats illness, SDOH interventions address the fundamental conditions of life—such as housing, food, safety, and social support—that profoundly shape health.[2] By tackling these root causes, healthcare can achieve "better outcomes" and "quality of life" [1] in a way that reactive, purely clinical interventions cannot.
  This holistic approach involves designing care around specific patient segments with shared needs—for instance, "elderly people with multiple chronic conditions".[25] By adopting such a patient-centric structure, clinical teams can proactively anticipate and deliver comprehensive solutions that encompass not only medical treatments but also critical non-clinical needs. Examples include ensuring reliable transportation for chemotherapy appointments or providing psychological counseling for individuals managing chronic pain.[25] This integrated care leads to demonstrably better health results, as it addresses barriers that often undermine

clinical efficacy. Furthermore, VBC emphasizes patient-centered care, actively involving patients and their families in care coordination and decision-making processes.[23] This engagement fosters greater adherence to care plans, leading to improved health outcomes and a higher quality of life for individuals, as patients become knowledgeable about their conditions and active participants in their own care management.[23] This underscores that investing in SDOH is essential for fulfilling healthcare's fundamental mission. It represents a shift from a disease-centric model to a person-centric model, where the goal is to enable individuals to achieve their fullest health potential, thereby generating significant mission-based returns that resonate with the core values of healthcare.

- **3.2. Achieving Health Equity and Reducing Disparities.**

A central mission-based return of Social Determinants of Health mitigation is the advancement of health equity. Health equity is defined as ensuring that every individual possesses a fair and just opportunity to achieve the best possible health, irrespective of their background, income, or geographic location.[1] This necessitates the active removal of systemic barriers such as inadequate access to nutritious food, unreliable transportation, unsafe living conditions, or insufficient financial resources.[2] Health disparities are not random occurrences; they are deeply rooted in unequal distributions of SDOH.[2] Simply treating symptoms will not close these gaps.[2] By explicitly targeting SDOH, VBC models, especially with the growing policy emphasis from CMS [26], become powerful vehicles for addressing these underlying societal inequalities.

SDOH are widely recognized as major contributors to persistent health disparities and inequities across populations.[2] Historical and systemic factors, including racial segregation and income inequality, have demonstrably led to significant disparities in health outcomes and substantial economic losses for society.[5] Recognizing this profound impact, policy frameworks are continuously evolving to embed health equity within Value-Based Care. For example, recent updates to the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Model in 2025 explicitly prioritize health equity, expanding efforts to address SDOH and health-related social needs (HRSNs). These policy changes include the introduction of equity-driven reimbursements and enhanced application review processes for MA organizations, signaling a clear governmental push towards equitable care delivery.[26] While notable progress has been made in integrating SDOH into individual care workflows and improving individual-level health, achieving true health equity still requires overcoming persistent gaps, particularly in community-level data integration and the implementation of upstream, universal strategies that address systemic issues rather than just individual needs.[6] This

highlights that SDOH mitigation within VBC is a direct pathway to achieving systemic health equity. It aligns the financial incentives of VBC with the moral imperative of social justice in health, making the pursuit of equitable outcomes a measurable and rewarded component of healthcare delivery. This is a profound mission-based return, contributing to a more just and healthy society.

- **3.3. Enhancing Patient Satisfaction and Community Resilience.**
  A key component of Value-Based Care is its profound emphasis on patient engagement and patient-centered care.[9] By actively involving patients and their families in their care coordination and providing comprehensive health education, VBC models consistently lead to increased adherence to care plans and, crucially, improved patient satisfaction.[9] When patients perceive that their holistic needs—extending beyond clinical symptoms to include social and economic factors—are understood and addressed, their trust in the healthcare system is significantly strengthened. Patient satisfaction [9] is a direct result of feeling holistically cared for. When healthcare addresses not only medical issues but also financial [24] and social needs [24], it builds deeper trust and engagement. This enhanced engagement [23] leads to better adherence to treatment plans and improved outcomes, which are key metrics for VBC success.

  Financial assistance programs, by alleviating the immediate financial barriers that often prevent patients from accessing necessary medical care, empower individuals and reduce stress, enabling them to focus more effectively on recovery and preventive health.[24]

This financial security fosters a sense of trust between patients and providers, encouraging open dialogue about sensitive concerns that might otherwise remain unaddressed.[24] Furthermore, by actively connecting patients with vital community resources and support groups, healthcare providers contribute significantly to building robust social support networks. These networks offer emotional encouragement, practical assistance, and a profound sense of belonging, all of which are critical for achieving better health outcomes and contribute directly to overall community well-being and resilience.[24] This demonstrates that the mission-based returns are not separate from, but rather contribute to, the overall success and sustainability of the VBC model, fostering a more engaged patient population and resilient community.

4. Strategic Implementation: Integrating SDOH into Value-Based Care Models

This section outlines the practical strategies and necessary components for effectively integrating SDOH mitigation into VBC models, focusing on technology, partnerships, and policy.

- **4.1. Leveraging Data and Technology: EHRs, Predictive Analytics, and Digital Tools.**
  Data Integration: A critical prerequisite for successful SDOH integration is the ability to combine aggregate clinical data with SDOH observations. This creates a holistic view of individual members and entire patient populations.[4] This integration allows for comparative analysis, revealing correlations between societal factors and health conditions, which in turn enables the prevention of adverse health events and associated cost reductions.[4] Historically, achieving this level of data integration has been a significant challenge for the healthcare industry.[4]

  EHR Utilization: Electronic Health Records (EHRs) serve as a foundational tool for providing comprehensive and up-to-date patient information. This is essential for identifying health disparities and ensuring consistent, high-quality care across diverse patient populations.[26] When integrated effectively, SDOH data within EHRs can activate embedded tools such as alerts and flags, guiding interventions like referrals for nutrition assistance or connecting patients to community health workers.[27] However, current utilization of EHRs for SDOH data collection remains low, with only 24% of hospital initiatives leveraging them for this purpose, and a significant 85% lacking community-level SDOH data integration.[6] Strengthening this integration is paramount for advancing SDOH initiatives.

  Predictive Analytics & AI: Advanced analytics and Artificial Intelligence (AI) are transformative tools for identifying high-risk individuals and populations by segmenting them based on social risk factors.[11] Machine learning algorithms, when properly trained and validated, can predict chronic disease risk, enabling proactive management and the deployment of personalized interventions to slow disease progression.[11] New partnerships, such as the collaboration between MedeAnalytics, Socially Determined, and Mathematica, are emerging to provide data-driven, actuarially validated frameworks for assessing the Return on Investment (ROI) of SDOH interventions at scale. These collaborations integrate SDOH risk data with existing financial, clinical, claims, and public data to provide a comprehensive picture.[29]

  Digital Health Technologies: The expansion of digital health technologies further

supports SDOH integration. Telehealth services can effectively break down geographical barriers, offering remote consultations to underserved and rural communities, ensuring timely medical support without the need for extensive travel.[26] Mobile health applications provide accessible health education, medication reminders, and self-care resources, empowering individuals to manage their health, especially in low-resource settings.[26] Wearable devices can track vital signs in real-time, allowing healthcare providers to intervene earlier when issues arise, thereby enhancing care coordination and potentially preventing costly acute events.[23]

Addressing Data Silos: Siloed patient information, where data is compartmentalized across disparate systems, represents a major barrier to achieving VBC goals.[31] Modern, integrated solutions that consolidate patient data into a single, easily accessible source are crucial for effective care coordination, accurate outcome tracking, and informed medical decision-making across the entire enterprise.[31] Patient portals, when fully utilized, can significantly streamline workflows and enhance patient engagement by providing a unified platform for communication and data access.[31] Multiple sources consistently emphasize the critical role of data and technology. The ability to collect, integrate, analyze, and act upon SDOH data directly translates into improved VBC performance, including cost reduction, better outcomes, and more effective risk stratification. This suggests that effective SDOH integration hinges on robust data infrastructure and advanced analytics. Without this, interventions are less targeted, and the financial and mission-based returns are harder to measure and prove, hindering scalability and investment. The explicit focus on "actuarially verified intervention opportunities" [29] underscores how data transforms SDOH interventions into financially credible propositions within VBC.

- **4.2. Fostering Cross-Sector Partnerships: Collaboration with Community-Based Organizations.**
  Effective mitigation of Social Determinants of Health necessitates a collaborative approach that extends significantly beyond the traditional confines of healthcare. Connecting the full network of stakeholders—including patients, healthcare providers, payers, home healthcare workers, community-based support organizations (CBOs), government entities, and mental health providers—is paramount for achieving success in both SDOH integration and Value-Based Care.[4] Healthcare organizations alone cannot solve the complex, systemic issues of SDOH; these are societal problems.[1] The consistent emphasis on multi-sector partnerships and the vital role of CBOs [3] suggests that effective SDOH integration

requires a broader, collaborative model.

Community-Based Organizations (CBOs) are indispensable partners in this endeavor due to their deep community roots, established relationships, and direct access to a wide array of local resources.[3] Healthcare providers can leverage these invaluable partnerships to address broader social needs by collaborating with organizations such as local food banks, housing assistance programs, and transportation services.[24] This collaboration explicitly acknowledges the interconnectedness of social determinants and health outcomes, enabling a more comprehensive and effective approach to patient well-being that extends beyond clinical interventions.[24] Public health bodies, such as the CDC, actively engage in collaborations with diverse partners to enhance public health capacity and promote frameworks that seamlessly integrate health equity and SDOH into community planning efforts.[1]
Building stronger, more formalized networks between healthcare providers and CBOs is essential for fostering coordinated efforts, facilitating shared learning, and ultimately developing comprehensive, integrated solutions that leverage the unique strengths of all sectors involved.[3] This highlights that achieving sustainable and impactful SDOH mitigation within VBC necessitates moving beyond a purely medical paradigm to an "ecosystem approach." This implies actively engaging and leveraging the unique strengths of non-healthcare sectors to deliver more comprehensive and sustainable interventions that address the root causes of health disparities. This collaborative model is crucial for maximizing mission-based returns by building healthier, more resilient communities.

- **4.3. Policy and Reimbursement Mechanisms: Facilitating SDOH Investments in VBC.**

Evolving Policy Landscape: The increasing shift towards value-based payment models by major payers, notably Medicare and Medicaid, inherently encourages the integration of Social Determinants of Health into healthcare delivery. CMS's ambitious goal of having all Medicare and Medicaid beneficiaries enrolled in VBC plans by 2030 underscores this strategic direction.[12] Policy changes, such as the VBC shift, "in lieu of" services, incentives, Z codes, and waivers, are clearly enabling SDOH integration.[12] However, the simultaneous mention of "insufficient funding," "FFS persistence," and "resistance" [28] indicates that policy alone is not a

complete solution.

"In Lieu Of" Services (ILOS): Recent CMS guidance now provides states with the flexibility to authorize Medicaid Managed Care Organizations (MCOs) to offer "in lieu of" services. These can include SDOH interventions, serving as substitutes for traditional Medicaid benefits, provided they are determined to be medically appropriate and cost-effective.[17] While the widespread adoption of ILOS for SDOH services is still in its nascent stages, this policy lever holds significant potential for expanding access to crucial non-medical support.

Incentive Payments and Quality Withholds: States can strategically utilize financial incentives or quality withhold arrangements to reward health plans for their investments in and demonstrated improvements related to SDOH. Such incentives might include rewarding plans that implement universal screening for social needs or make other strategic investments in addressing health-related social needs.[3]

Risk Adjustment: A crucial aspect of fair payment within VBC models involves appropriately incorporating social risk factors into risk adjustment methodologies. This prevents providers from being financially penalized for serving high-need populations who, due to significant SDOH challenges, may exhibit higher healthcare utilization despite the providers' best efforts to deliver high-quality care.[12]

Standardized Coding: The introduction of International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) "Z" codes by CMS allows for standardized documentation and improved data capture of SDOH risk assessments. This standardization facilitates the integration of SDOH data into payment models, enabling more precise tracking and reimbursement for related services.[12]

Section 1115 Waivers: States possess the flexibility to utilize Section 1115 waivers to test innovative approaches for addressing SDOH. This authority also allows them to secure federal matching funds for related services and supports, fostering pilot programs and scalable interventions.[32]

Challenges: Despite these advancements, significant barriers persist in the widespread implementation of SDOH-focused VBC. These include insufficient funding, the continued prevalence of the FFS model, and a degree of resistance from some healthcare professionals to adapt to new care models, particularly when

balancing traditional FFS reimbursements with VBC contracts.[33] There is also a perceived lack of short-term ROI and ongoing challenges in accurately identifying and allocating costs, as well as securing consistent reimbursement for non-medical SDOH interventions.[28] This highlights the dual nature of policy: it can be a powerful catalyst for SDOH integration within VBC, but existing structural barriers and slow adoption can also act as significant bottlenecks. For stakeholders, this implies that while advocating for progressive policies is crucial, equally important is addressing the operational and financial challenges that hinder the full realization of these policies' potential. Continuous refinement and targeted support are necessary to unlock the full monetary and mission-based returns.

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5. Challenges and Future Outlook

This section addresses the persistent barriers to widespread SDOH integration and outlines strategies for fostering scalable and sustainable interventions.

- **5.1. Addressing Barriers to Widespread SDOH Integration.**
  Data Infrastructure Gaps: A primary and persistent challenge to successful SDOH integration is the inconsistent collection, integration, and utility of SDOH data across various healthcare systems.[27] There remains limited utilization of Electronic Health Records (EHRs) for comprehensive SDOH data collection, with only 24% of initiatives leveraging this capability. Furthermore, a significant gap exists in community-level data integration, affecting 85% of initiatives.[6] Siloed patient information, fragmented across disparate systems, severely hinders effective care coordination, proactive preventive medicine, and the ability to accurately measure performance within a Value-Based Care context.[31] The consistent highlighting of practical, systemic, and cultural barriers indicates that these are not about the *concept* of SDOH or VBC, but the *execution*.

Financial and Reimbursement Hurdles: Despite growing evidence of a positive Return on Investment (ROI), a perceived lack of short-term returns on SDOH investments continues to be a barrier. Difficulties in precisely identifying and allocating costs to specific patient care outcomes, coupled with a general lack of consistent coverage and reimbursement by payers for non-medical social services, remain significant financial hurdles.[28] Overall, insufficient funding continues to be a critical challenge for the widespread implementation of Value-Based Healthcare.[33]

Operational and Cultural Resistance: Outdated practice workflows and reliance

on manual processes create inherent inefficiencies, lead to delays, and introduce inaccuracies, thereby hindering progress towards achieving VBC goals.[31] There is also an observable resistance from some healthcare professionals to adapt established care models and fully engage with new paradigms, particularly when navigating the complexities of balancing traditional Fee-for-Service (FFS) reimbursements with the demands of VBC contracts.[22]

Evidence and Measurement Gaps: While the overarching benefits of SDOH interventions are increasingly clear, there remain specific gaps in understanding which intervention components are most effective for particular SDOH types. Additionally, there is a need for more robust evidence on how to achieve sustained and lasting improvements in health outcomes through these interventions.[35] The lack of standardized methods for consistently measuring outcomes and demonstrating financial sustainability further complicates the transition to VBC and hinders broader adoption.[33] This emphasizes that the primary obstacles to realizing the full dual returns are operational and systemic, rather than a lack of conceptual understanding or evidence of benefit. For leaders, this implies that overcoming these challenges requires robust investment in infrastructure, process re-engineering, and change management, not just awareness campaigns.

- **5.2. Strategies for Scalable and Sustainable Interventions.**
To overcome existing barriers and foster scalable, sustainable SDOH interventions within Value-Based Care, a multifaceted strategic approach is essential:
Enhanced Data Infrastructure and Analytics: Developing new data resources and embedding rigorous evaluations into all social service programs are crucial steps for building a robust evidence base and understanding effectiveness.[35] Implementing integrated data solutions that combine clinical, financial, and operational data into a unified platform will enable more informed decision-making, precise performance tracking, and targeted interventions.[22] Leveraging technology platforms to facilitate appropriate and easy patient referrals to social services is also key to streamlining access to needed resources.[3]

Policy Alignment and Innovation: Continuous efforts are required to align financial incentives to support SDOH interventions. This includes advocating for policies that mandate value-based payments as part of provider reimbursements and linking quality withhold payments directly to SDOH-related outcomes.[3] Advocating for the broader and more flexible use of "in lieu of" services and ensuring that SDOH are appropriately considered in risk adjustment methodologies are vital policy priorities to ensure equitable compensation for providers serving high-need populations.[12]

Shift to Community-Level and Upstream Approaches: To achieve true systemic impact, healthcare systems must increasingly pivot towards upstream, universal strategies and community-wide interventions. These approaches address the underlying social and economic conditions that contribute to health disparities, rather than solely mediating individual needs.[6] This necessitates a greater focus on population health management tools that enable providers to segment patient populations by risk, implementing interventions before conditions escalate.[22]

Strengthened Cross-Sector Collaboration: Building stronger, more formalized networks and partnerships between healthcare providers, payers, and Community-Based Organizations (CBOs) is essential for comprehensive SDOH mitigation.[3] This collaboration facilitates shared learning, coordinated research efforts, and the development of integrated solutions that leverage the unique strengths and expertise of all sectors involved, creating a more cohesive and effective health ecosystem. The solutions outlined are not quick fixes but require sustained effort and investment across multiple domains. This suggests that achieving scalable and sustainable SDOH integration is a continuous process of evolution and adaptation. This frames SDOH integration within VBC as a long-term, transformative journey for the healthcare industry. It implies that success will not come from isolated initiatives but from a fundamental shift in mindset, operational structures, and collaborative models. Emphasizing this long-term vision helps manage expectations and secure sustained commitment from stakeholders, ensuring that the dual returns, monetary and mission-based, are maximized over time.

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6. Conclusion: Realizing Dual Returns for a Healthier Future

This report underscores that mitigating Social Determinants of Health is not merely a philanthropic endeavor but a financially prudent and strategically imperative component of a successful Value-Based Care model. The evidence is clear: by proactively addressing factors such as housing instability, food insecurity, and access to education, healthcare systems can significantly reduce high-cost utilization, improve patient outcomes, and achieve demonstrable returns on investment.

The fundamental shift to Value-Based Care inherently aligns financial incentives with the holistic well-being of patients. This transition moves healthcare beyond a volume-driven Fee-for-Service model to one that rewards quality, efficiency, and

improved health outcomes. This alignment creates a powerful impetus for investing in SDOH, transforming these interventions into drivers of both monetary savings and enhanced revenue streams through VBC arrangements.

Beyond the quantifiable financial benefits, the mission-based returns are equally compelling and vital. Integrating SDOH mitigation is fundamental to achieving true health equity, reducing pervasive disparities, and fostering a healthcare system that provides fair and just opportunities for all individuals to achieve optimal health. This integrated approach enhances patient satisfaction, builds trust within communities, and strengthens overall community resilience, thereby fulfilling healthcare's profound societal mission.

To fully unlock these dual returns, monetary and mission-based, continued strategic investment is essential. This includes developing robust data infrastructures and leveraging advanced analytics and digital tools to accurately identify needs, stratify risks, and measure impact. It also requires fostering deep, cross-sector partnerships with community-based organizations that possess unique local expertise and reach. Furthermore, continuously evolving policy and reimbursement mechanisms are necessary to support and incentivize comprehensive SDOH integration across the healthcare landscape.

The future of healthcare within a value-based framework is one where clinical excellence is seamlessly integrated with social support, where health is understood and addressed in its broadest context, and where the pursuit of financial sustainability and societal well-being are inextricably linked. By embracing SDOH mitigation as a core strategy, healthcare leaders can realize a healthier, more equitable, and more financially robust future for all.

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