



Bridging the Gap: Interventions to Improve Access to Cancer Treatment in Socially Disadvantaged Populations

Who is this brief for:

- Clinicians (direct care providers in oncology), healthcare system decision makers and administrators (responsible for resource allocation, funding, program delivery)

Key Messages:

- A diverse range of interventions exist to improve cancer treatment access for socially disadvantaged populations, offering health systems immediate pathways to advance equity.
- To maximize impact, healthcare leaders and clinicians must shift from passive care delivery to equity-embedded, community-driven models.
- Systemic integration must prioritize flexible, locally tailored strategies that flatten traditional power dynamics, utilizing intersectional frameworks to dismantle structural barriers, and directly improve patient-reported outcomes.

Executive Summary

Socially disadvantaged populations face systemic barriers that prevent them from receiving timely, equitable access to cancer treatment.^{1,2} Current interventions, services, and models of care that have been developed to improve access to cancer treatment for those who are socially disadvantaged are moderately effective; specifically, patient navigation interventions and interventions designed to strengthen the cancer health system and/or cancer service delivery organizations demonstrate the most effectiveness. Though these interventions show promise, they do not fully address the needs of socially disadvantaged people, who face layered obstacles to receiving equitable cancer care treatment, including language barriers, stigma, discrimination, transportation challenges, inflexible work schedules, and lack of culturally responsive services.^{3,4} The nature of these interventions sometimes fails to account for the interconnectedness and compounding nature of these barriers; without recognizing these intersecting realities, cancer treatment may appear accessible but remain practically out of reach for those most in need. When services do not align with clients' lived experiences or fail to acknowledge structural inequities, clients may feel misunderstood and alienated, contributing to early dropout, inconsistent participation, and poorer treatment outcomes. To maximize effectiveness, a shift is needed from passive models of care to equity-centered, equity-embedded, community-driven and contextually tailored models of care.



Background & Context

- Socially disadvantaged people experience inequities in timely access to high-quality cancer care. Unequal and delayed access negatively affects cancer outcomes,^{1,2} including mortality and quality of life.^{5,6,7}
- These inequities exist even in countries with universal healthcare, such as Canada, where cancer outcomes remain strongly correlated with income⁸ and are further exacerbated in countries without universal coverage, such as the United States.^{9,10,11,12}
- In health systems lacking universal coverage, socially disadvantaged populations face significant gaps in insurance that limit access to early detection and treatment.^{1,13}
- Historically, public health resources and cancer care infrastructure have favoured economically advantaged regions and populations, while socially and economically disadvantaged groups face barriers including the inability to take time off work, transportation challenges, and out-of-pocket expenses.¹⁴
- Factors contributing to inequitable access to cancer treatment include:
 - **Structural inequities:** long-standing societal disparities in wealth, education,¹⁵ housing, employment,³ and health insurance.^{1,2}
 - **Health system design:** fragmented systems,^{16,4} inequitable provider access,³ and policies that limit care access to marginalized populations.⁴
 - **Economic barriers:** high treatment cost, lack of insurance, and indirect expenses such as transportation and lost income.³
- Access to cancer care is paramount because timely diagnosis and effective treatment can mean the difference between life and death. Addressing these barriers is critical to prevent delayed diagnoses, treatment complications, and higher mortality among socially disadvantaged populations.
- Failing to address inequities in cancer care through coordinated policy, clinical, and social interventions can burden patients and communities, strain healthcare systems and increase costs, erode public trust, and undermine the effectiveness of public health efforts.

Research Approach

We conducted a scoping review to map interventions, services, and models of care aimed to improve access to cancer treatment for people experiencing varying forms of social disadvantage. We searched Medline, EMBASE and CINAHL for relevant studies published before 2025; 57 studies were included. We included peer-reviewed primary research specific to adult (18+) populations experiencing social disadvantage (e.g., low income or educational attainment, unstably housed, member of a racialized group, rural geography); studies described a model of care, service, or intervention aimed at improving access to or receipt of cancer treatment (including surgery, radiotherapy, systemic therapy, stem cell transplant, or bone marrow transplant).

Research Findings

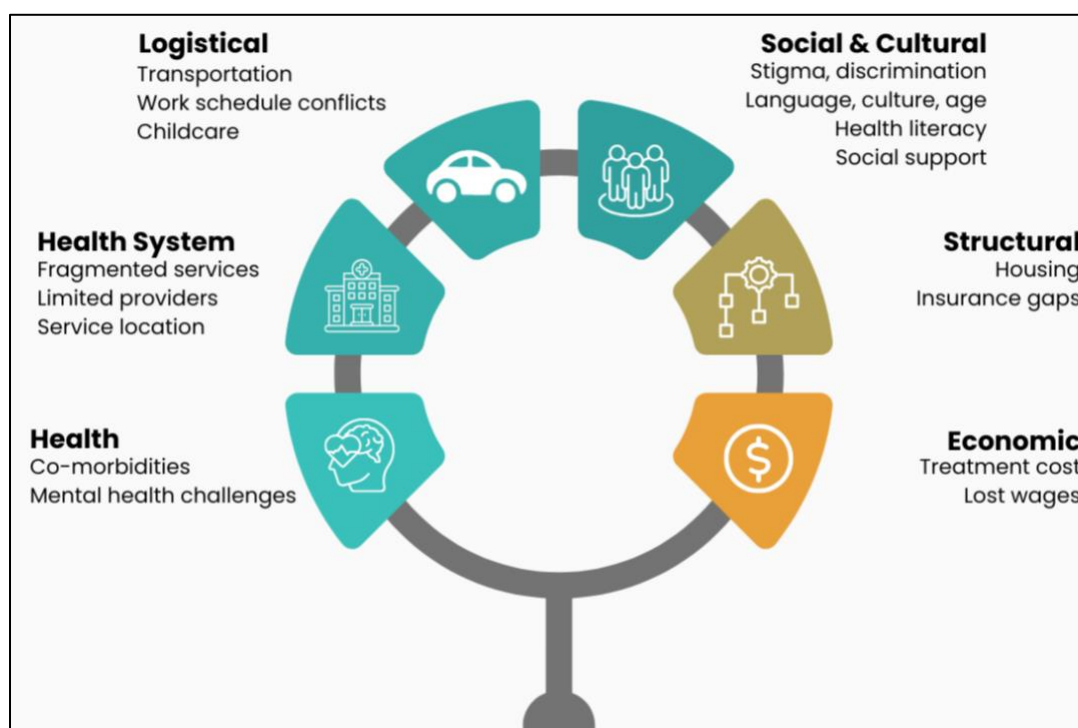
Interventions were designed, implemented and evaluated to address a range of cancer types and improve access to a range of cancer treatments (Table 1). Interventions targeted barriers at all levels, depending on the specific intervention (Figure 1).



<i>Type of Cancer Addressed by Intervention (n)</i>		<i>Type of Cancer Treatment Targeted by Intervention (n)</i>	
Gastrointestinal (GI)	28	Surgery	37
Breast	27	Systemic Therapy	27
Genitourinary (GU)	19	Chemotherapy	21
Lung	15	Hormone therapy	8
Gynecological	10	Immunotherapy	5
Liver	10	Targeted therapy	1
Head & Neck	7	Not specified	4
Melanoma	6	Radiotherapy	25
Sarcoma	2	Therapeutic clinical trial	10
Brain & CNS	4	Bone marrow transplant	1
Other	6	Not specified	4

We identified four main categories of interventions: education-based interventions, patient navigation interventions, institutional and system-focused interventions, and policy-focused interventions. Barriers most frequently reported were insurance coverage, finances, and transportation.

Figure 1: Barriers addressed by included interventions



Micro-level: Education-based interventions

Education-based interventions focused on patient education^{17,18,19} and healthcare provider education. Educational strategies included cultural competency training, printed and video patient educational materials, and an individualized coaching intervention primarily focused



on patient education. Evaluations of these educational interventions had minimal impact on improving access to cancer treatment.

Micro-meso level: Patient navigation interventions

Patient navigation holds promise as an intervention with the capacity to promote more equitable and accessible care. We noted variations in how patient navigation was designed and delivered (including variations on who is navigating, where navigation services are housed, the components of patient navigation services, and how long patients are navigated through the cancer continuum). Several patient navigation interventions were culturally tailored to the specific populations served,^{20,21} and in some cases, there was evidence of community engagement in the design²² and implementation²³ of the intervention. Community engagement, partnership, collaboration, and co-design are particularly important and have been identified as key pathways to promoting health equity in cancer care for socially disadvantaged groups.^{24,25,26,27} Although patient navigation is a flexible, tailorable and often effective intervention in improving access to cancer treatment, it also points towards symptoms of dis-integrated and dysfunctional cancer care systems,²⁸ indicating the need for broader health system reform and multi-level intervention. Aspects of patient navigation, such as social needs screening (e.g., financial or transportation barriers), can be implemented outside of navigation services to reduce barriers to care and promote more equitable access.

Meso-level: Institutional and system-focused interventions

Interventions designed to strengthen health systems or healthcare organizations were encouraging, and evaluations indicated that most were effective in improving access to cancer treatment. Intervention components varied but often included multiple components designed to work synergistically. For example, Nipp et al.¹⁴ reported on a multi-component intervention (the Cancer Care Equity Program), which included community outreach and education, patient navigation, and a financial assistance program to improve access to clinical trials. Evaluations suggest that smaller-scale and potentially less costly system level interventions may also be effective in advancing cancer health equity. For example, Chen et al.²⁹ pilot tested an appointment scheduling intervention implemented within a tertiary care radiation oncology clinic in which institutional structures and process were developed to offer consultation with an oncologist on the same day as a referral was received. This institutional intervention used existing staff but focused on developing new ways of organizing and delivering care, suggesting that small shifts can lead to significant gains.

Macro-level: Policy-focused interventions:

Research on policy-focused interventions and access to cancer treatment showed mixed results, likely because policies differ in design, implementation, and context. Some studies demonstrated that policy-based interventions were effective in not only improving overall access to cancer treatment but also in reducing disparities in access to treatment between groups,² while others demonstrated that pre-existing disparities in access to cancer treatment were reduced but persisted¹² or that access improved for some groups but disparities remained.³⁰ Reforms like the Affordable Care Act expanded insurance coverage in many American states, but variations in state-specific Medicaid coverage,³¹ provider availability, and cost-sharing structures means increased coverage does not always translate into timely or equitable treatment access. In addition, persistent structural barriers like rural provider

shortages, socioeconomic disparities, and healthcare system fragmentation can limit the impact of policy changes.

Figure 2: Types of Interventions Implemented to Improve Access to Cancer Treatment

	 Education Interventions	 Patient Navigation Interventions	 Institutional & System Interventions	 Policy-Based Interventions
Key Components	Educational strategies targeting patients or service providers	Personalized guidance across care pathway, care coordination	Changes to processes, structures, and/or service delivery	Structural reforms in coverage or health policy
Example Activities	Cultural competency training for providers	Appointment coordination, identifying/reducing barriers, education	Community outreach, navigation, financial support, tumor board	Insurance expansion, Medicaid reforms
Reported Benefits*	Few	Improved opportunity to access treatment, timeliness, treatment quality; reduced inequities	Improved opportunity to access treatment, receipt, timeliness, treatment quality; reduced inequities	Improved opportunity to access treatment, receipt, timeliness, treatment quality; reduced inequities
Limitations	Little impact on access to treatment	Addresses downstream impacts of fragmented systems but not root causes	Implementation complexity	Effects vary significantly due to policy implementation and contextual factors

*Specific results varied by study. See Figure 3 or full publication for more details.

Implications & Recommendations

1. Optimize Patient Navigation to Address Multilevel Barriers

- While patient navigation models vary widely in design, scope, and duration across the cancer care continuum, they consistently succeed when designed to address both individual patient challenges and overarching health system barriers simultaneously.
- Recommendation:** Shift away from one-size-fits-all navigation programs. Instead, invest in flexible models that are culturally tailored to your specific local population, and actively engage the community during the design and implementation phases to ensure maximum relevance and trust. Aspects of navigation, including discussion-based social needs screening, can be implemented outside of navigation services.³²



2. High-Impact Equity Gains Do Not Require High-Cost Overhauls

- Multi-level systemic changes and electronic health record integrations are highly scalable and sustainable. However, small-scale, low-cost operational shifts can also be effective at advancing cancer health equity.
- **Recommendation for Action:** Look for immediate, practical optimizations within existing clinic structures. For example, redesigning workflows to offer same-day oncologist consultations upon referral requires minimal new resources but may significantly accelerate access to care for vulnerable groups.

3. Move Beyond Income: Adopt an Intersectional Lens

- Current equity research frequently defaults to narrow socioeconomic proxies (such as income or Medicaid enrollment), failing to capture how overlapping systemic inequities compound to impact cancer patients.
- **Recommendation for Action:** Transition to theoretically informed, intersectional frameworks for data collection and program evaluation. Shifting organizational focus from individual patient behaviors to structural inequities will better inform equitable resource allocation and clinical practice.

4. Center Communities via Participatory Design and Patient-Reported Metrics

- Inequitable care leaves marginalized patients feeling unheard and undervalued. True intervention effectiveness and long-term sustainability are achieved when communities are equal partners in research, service design, and evaluation processes.
- **Recommendation for Action:** Embed Patient-Reported Outcomes (PROs) and Patient-Reported Experiences (PREs) directly into clinical evaluations to capture patient quality of life and experience.
 - Utilize community-based participatory action approaches to flatten traditional power dynamics, ensuring marginalized communities co-identify barriers and drive the goals of your equity initiatives.

Conclusion

A diverse range of interventions exist to improve cancer treatment access for socially disadvantaged populations, offering health systems immediate pathways to advance equity. To maximize impact, healthcare leaders and clinicians must shift from passive care delivery to equity-embedded, community-driven models. Systemic integration must prioritize flexible, locally tailored strategies that flatten traditional power dynamics, utilizing intersectional frameworks to dismantle structural barriers, and directly improve patient-reported outcomes.

For further information:

Horrell, T. C., Bourgeois, A., Breik, N., Kleijberg, M., Linton, J., Stirling, M., & Stajduhar, K. I. (2026). A scoping review of services, models of care, and interventions to improve access to cancer treatment for adults who are socially disadvantaged. *SSM Health Systems*, 7(100238). <https://www.sciencedirect.com/science/article/pii/S2949856226000723?via%3Dihub>



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Additional Content

Figure 3 (Horrill, T. C., Bourgeois, A., Breik, N., Kleijberg, M., Linton, J., Stirling, M., & Stajduhar, K. I. (2026). A scoping review of services, models of care, and interventions to improve access to cancer treatment for adults who are socially disadvantaged. *SSM Health Systems*, 7(100238). <https://www.sciencedirect.com/science/article/pii/S2949856226000723?via%3Dihub>)

	Interventions Improved Receipt of Treatment (n=12)	Interventions Improved Throughput (n=13)	Interventions Improved Quality of Treatment (n=9)	Interventions Improved Opportunity to Access Care (n=22)	Interventions Reduced Inequity (n=18)
 Micro-Level: Education Interventions (n= 4 included in review)	None	None	None	Robinson et al., 2017	None
 Micro/Meso-Level: Patient Navigation Interventions (n=14 included in review)	None	Dudley et al., 2012 Hunnibell et al., 2012 Ramirez et al., 2014	Chen et al., 2010 Fouad et al., 2016 Goodwin et al., 2003 Guadagnolo et al., 2011 Ko et al., 2014	Fouad et al., 2016 Holmes et al., 2012 Proctor et al., 2011	Dudley et al., 2012 Fouad et al., 2016 Goodwin et al., 2003 Guadagnolo et al., 2011 Hunnibell et al., 2012 Ko et al., 2014 Proctor et al., 2011
 Meso-Level: Institutional and System Interventions (n=7 included in review)	Cykert et al., 2019	Charlot et al., 2022 Chen et al., 2023	Charlot et al., 2022	Anwuri et al., 2013 Nipp et al., 2016 Scrace et al., 2009	Charlot et al., 2022 Chen et al., 2023 Cykert et al., 2019 Scrace et al., 2009 Tang et al., 2021
 Macro-Level: Policy Interventions (n=32 included in review)	Ajkay et al., 2018; Crocker et al., 2019; Eguia et al., 2018; Elshami et al., 2022; Hoehn et al., 2021; Lima et al., 2023a; Lima et al., 2023b; Lin et al., 2022; Ortiz Rueda, 2024; Sabik et al., 2022; Shi et al., 2024	Adamson et al., 2021; Ajkay et al., 2018; Albright et al., 2021; Hoehn et al., 2021; Mobley et al., 2023; Primm et al., 2024; Shi et al., 2024; Tamirisa et al., 2024	Ajkay et al., 2018 Fonesca et al., 2022 Kaelberer et al., 2023	Ajkay et al., 2018; Albright et al., 2021; Al-Refaie et al., 2017; Crocker et al., 2019; Eguia et al., 2018; Fonesca et al., 2022; Gaba et al., 2023; Irace et al., 2023; Laughlin et al., 2023; Lee et al., 2021; Liu et al., 2020; Mesquita-Neto et al., 2020; Obeng-Gyasi et al., 2022; Schpero et al., 2024; Takvorian et al., 2020	Adamson et al., 2021 Albright et al., 2021 Jiang et al., 2023 Obeng-Gyasi et al., 2022 Primm et al., 2024 Tamirisa et al., 2024