

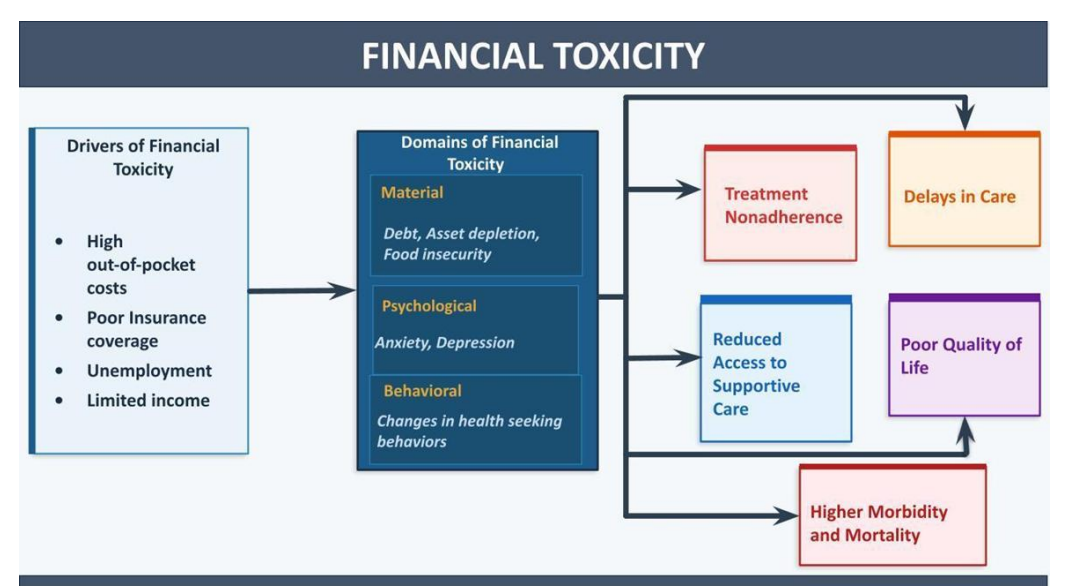
# Navigating Financial Toxicity in Global Cancer Care: A Systematic Review of Financial Navigation Interventions

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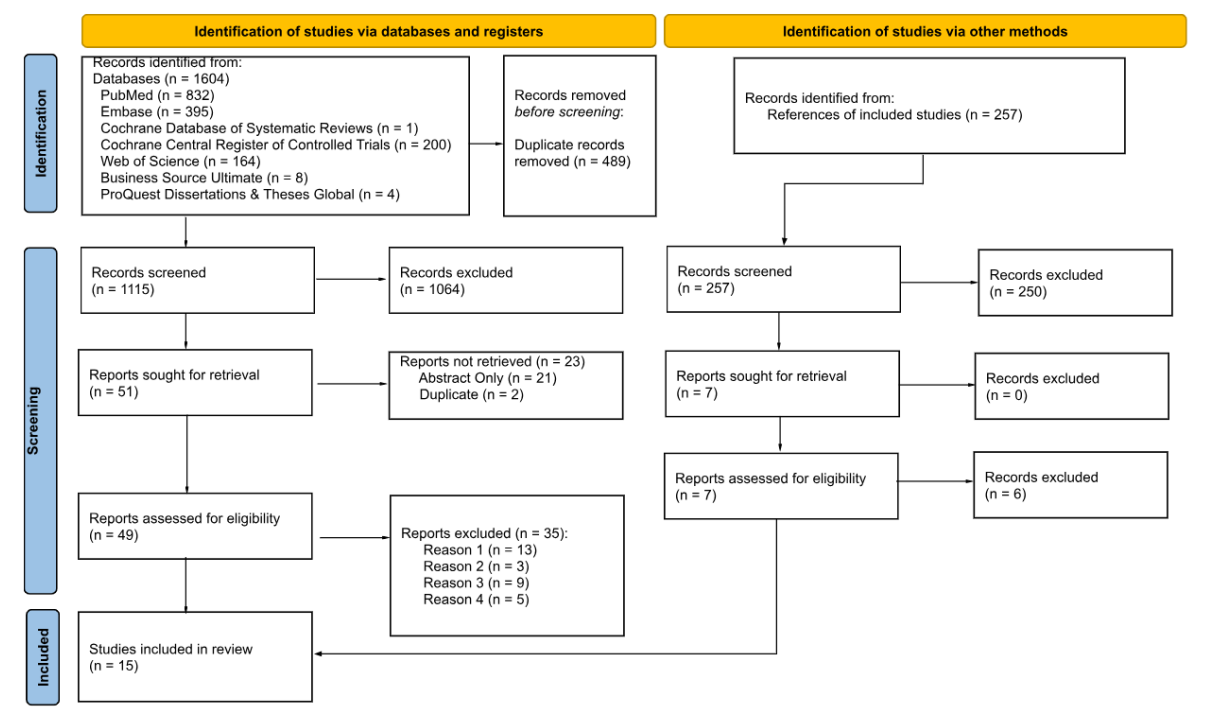
## PURPOSE

- Financial Toxicity (FT) is a major barrier to cancer care, especially in LMICs
- Financial Navigation Programs (FNPs) aim to reduce financial hardship through insurance navigation and resource support
- Evidence on the effectiveness and implementation of oncology FNPs remains limited and fragmented
- Objective:** Evaluate the impact of FNPs on for both individual and healthcare systems



## METHODS

- STANDARDS** Cochrane Handbook v6.5; reported per PRISMA 2020; prospectively registered PROSPERO ID 1239362
- DATABASES** MEDLINE, Embase, Cochrane CENTRAL, Cochrane Database of Systematic Reviews, Web of Science, Business Source Ultimate, ProQuest Dissertations & Theses Global
- SEARCH DATES** Inception to 26 November 2025; English-language; last 20 years; no methodological filters
- INCLUSION** Original research evaluating oncology FNPs in patients and/or caregivers; RCTs, quasi-experimental, cohort, pre-post, mixed-methods, qualitative, and program evaluations
- EXCLUSION** Case reports, narrative reviews, editorials, non-FNP studies
- SCREENING** Two independent reviewers (Rayyan); discrepancies resolved by consensus and senior adjudication
- RISK OF BIAS** RoB 2 (RCTs), ROBINS-I (non-randomized), CASP (qualitative), MMAT (mixed-methods)
- SYNTHESIS** Narrative synthesis given heterogeneity; grouped by intervention characteristics, patient FT, clinical outcomes, implementation, and system-level outcomes



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## TABLE 1. Thematic Synthesis of Financial Navigation Program Outcomes

**Significant FT reduction**  
Validated scales · N=5 **+5.7-6.9** COST pts

Sig. improvements across multiple pilots using COST Score  
Uninsured cohorts most pronounced — e.g., 6.6 → 15.2

**6.6 → 15.2 uninsured**

Edward (2024); Wheeler (2024); Djulbegovic (2023); Sadigh (2022); Wheeler (2020)

**Increased health system ROI**  
N=4 studies **\$2.1M** avg/hosp/yr (Yezeffski 2018)

Revenue recovery: \$259,593-\$296,832 net institutional increases (Belluomini 2021; Lambert 2019)

Co-pay assistance +70%, free drug value +55% (Monak 2018)

**+70% co-pay** **+55% free drug**

Belluomini (2021); Lambert (2019); Monak (2018); Yezeffski (2018)

**Improved well-being**  
N=5 studies **75%** improved MH

**PSYCHOLOGICAL / MENTAL HEALTH**

**Follow-up** 75% reported improved mental well-being (Sadigh 2022)

**Follow-up** Sig. improvement in caregiver psychological response (p<0.001) and parent proxy global health (p=0.004) (Edward 2024)

**QUALITY OF LIFE**

**Follow-up** Sig. physical health QoL improvement in adult patients (p=0.036) (Edward 2024)

**Follow-up** NS QoL improvement across arms (Henrikson 2025; Bell-Brown 2024; Djulbegovic 2023)

Sadigh (2022); Edward (2024); Henrikson (2025); Bell-Brown (2024); Djulbegovic (2023)

**Greater adherence**  
N=4 studies **100%** plans maintained

**75%** non-adherent at baseline → **100%** plans maintained post-FN → **7%** cost-related non-adherence

**Baseline** 75% reported cost-related non-adherence before FN (Sadigh 2019); dropped to 4.3% at enrollment in subsequent study (Sadigh 2022)

**Follow-up** 100% of treatment plans maintained post-FN; only 1 patient refused recommended care (Sadigh 2022)

**Observed** Cost-related non-adherence only 7% (n=2) across program (Watabayashi 2020)

**NS** Adherence assessed; no sig. change detected (Henrikson 2025)

Sadigh (2019); Sadigh (2022); Watabayashi (2020); Henrikson (2025)

**No significant change**  
Validated scales · N=6 **NS** primary intervals

Metrics flat at primary intervals; attributed to short windows, underpowered samples, or macro-barriers

Henrikson (2025); Bell-Brown (2024); Farrugia (2021); Watabayashi (2020); Kircher (2019); Sadigh (2019)

## RESULTS

- 15 studies** included (2018–2025), all U.S.-based; 3 RCTs and the remainder nonrandomized pilots, cohorts, and implementation reports. Sample sizes ranged from 12 to 11,186 across diverse oncology settings.
- Two program models emerged:** screening-based referral (patients screened for FT risk, then referred to a navigator) and proactive outreach (navigators identify patients via barriers to care). Financial toxicity was the most frequently assessed outcome, measured with the COST tool in 10/15 studies.
- Cost savings reported in 8/15 studies**, with per-participant savings ranging from \$350 to \$16,633 (CostCOM pilot, Sadigh 2022). Reporting was heterogeneous, including mean savings, total program savings, and OOP reductions.
- Clinical outcomes were limited;** only 2 studies directly assessed treatment adherence. Baseline cancer-care nonadherence was low (~2–4%), though higher for non-cancer (17.4%) and preventive (8.7%) services. Despite persistent financial worry (77%), 75% of participants reported improved mental well-being and 83% found the intervention beneficial.
- Positive ROI in 4 studies**, including direct revenue gains of \$227,088 and \$259,593, and ~\$2.1M in annual system-level savings via reduced charity care and prevented write-offs (Yezeffski 2018).
- Methodological quality was variable**, with moderate-to-high risk of bias across most nonrandomized studies due to selection bias, single-site sampling, and attrition; one RCT (Djulbegovic 2023) was rated high risk overall.

## STRENGTHS & LIMITATIONS

- Strengths:** First systematic review to synthesize oncology FNPs as a distinct care-delivery model across patient, clinical, implementation, and system-level outcomes, using study-design-matched risk-of-bias assessment.
- Limitations:** Heterogenous nature made some comparison difficult; moderate-to-high risk of bias across most studies, driven by missing outcome data and reliance on self-reported measures. Single-site convenience samples and abstract-only reports limited appraisal. Treatment adherence measured directly in only 2/15 studies. Race/ethnicity reported in 9/15 (predominantly non-Hispanic White).
- Critical evidence gap:** All 15 included studies were conducted in the United States. No evidence from LMICs, where FT is most severe and most directly linked to treatment interruption.

## RECOMMENDATIONS

- FOR RESEARCHERS**
- Strengthen study designs**  
Use RCTs or quasi-experimental designs to reduce selection bias
  - Standardize outcomes**  
Use objective clinical metrics and validated patient-reported instruments
  - Improve outcome reporting**  
Enhance reporting of implementation-based outcomes
  - Report transparent methods**  
Detail fidelity and analytic plans in peer-reviewed publications
  - Evaluate economic impact**  
Include cost-effectiveness analyses to support scalability
  - Prioritize equity**  
Ensure generalizability across diverse demographic groups

- FOR Policymakers**
- Integrate FNPs into care**  
Embed financial navigation into routine oncology workflows
  - Invest in workforce training**  
Train FNPs and healthcare workers for effective delivery
  - Build equitable frameworks**  
Establish policies ensuring access and protecting patients from financial barriers