Implementation and Preliminary Outcomes of an Integrated Nutrition, Emotional, and Social Support Pilot Program for Oncology Patients in a Specialty Pharmacy in Puerto Rico

Zaritza Cajigas, PharmD, BCPS, Vivian Ferrer, Psy.D, Carmen Colón, LND, Daniel Díaz, MSW

Objective

To describe the implementation process, feasibility, and preliminary outcomes of a pilot program that embedded registered dietitian, emotional support, and social work services within a specialty pharmacy serving oncology patients in Puerto Rico.

Background

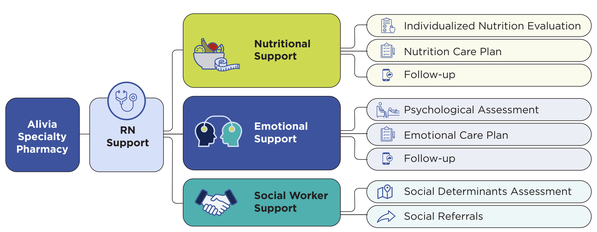
Oncology patients managed through specialty pharmacies face nutritional, psychosocial, and socioeconomic barriers that adversely affect treatment tolerance, medication adherence, and health-related quality of life.[1][2][3] National guidelines from the NCCN and ASCO/NCODA emphasize the integration of distress screening, nutritional assessment, and social work services into oncology care, yet real-world implementation within specialty pharmacy settings remains limited.[4][5][6] Medically integrated pharmacy models have demonstrated improvements in adherence and reductions in prescription abandonment through proactive, multidisciplinary interventions, but few have incorporated dedicated nutrition, emotional support, and social work services as embedded components of the pharmacy care model.[1][7] Furthermore, data from Hispanic/Latino populations in the United States, who face distinct cultural, linguistic, and socioeconomic barriers to cancer care, are underrepresented in the supportive care literature.

Methods

This descriptive, observational pilot study evaluated the implementation and early outcomes of an integrated supportive care program embedded within a specialty pharmacy serving oncology patients in Puerto Rico. Program implementation began during the first quarter of 2026 (January to March 2026), with ongoing supportive care services. The program was implemented using a sequential phased implementation strategy, whereby nutrition services were introduced first, followed by emotional support and, subsequently social work services. Outcomes presented in this analysis include data collected during both Q1 and Q2 2026.

A multidisciplinary team comprising a registered dietitian, an emotional support clinician, and a licensed social worker delivered integrated supportive care services within the existing specialty pharmacy workflow.

Alivia Specialty Pharmacy Patient Support Model



Data Analysis

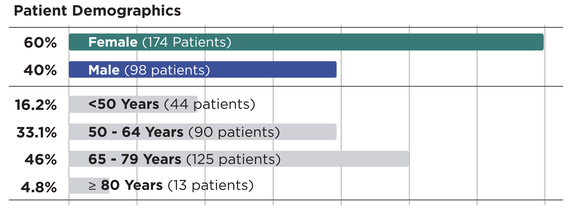
Descriptive statistics were used to summarize program reach, service utilization, screening results, identified supportive care needs, and preliminary outcomes across all service lines.

Results

922 interventions

369 Nutritional Support | **374** Emotional Support | **179** Social Worker Support

Patient Demographics



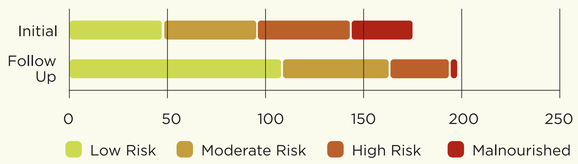
Most Prevalent Cancer Diagnoses

Breast Cancer | Prostate Cancer | Colon Cancer

Nutritional Support

Service Utilization

Nutritional Risk Shift



Malnourished classification **decreased by 85%** from initial to follow-up assessment.

Goal Attainment

- **91%** **Protein** (Assigned to 135 patients)
- **79%** **Improve variety of foods** (Assigned to 165 patients)
- **74.2%** **Weight Maintenance or Weight Gain** (Assigned to 66 patients)

Treatment Tolerance

Of 158 patients reporting GI side effects at initial assessment, 79 (50.0%) continued to report GI symptoms at follow-up. Among those with persistent symptoms (n=79): **32 (40.5%) improved with fewer symptoms than baseline, 43 (54.4%) remained stable with no worsening, and only 4 (5.1%) experienced worsening symptoms.**

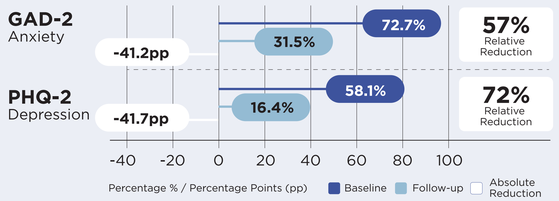
Emotional Support

Service Utilization

Total Activities Delivered (374)

Anxiety & Depression Screening

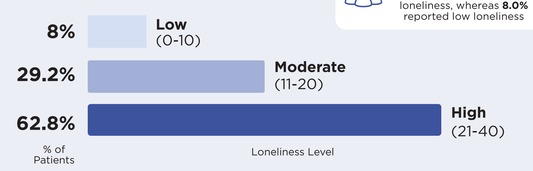
Total Activities Delivered (374)



Loneliness Assessment

Baseline (115)

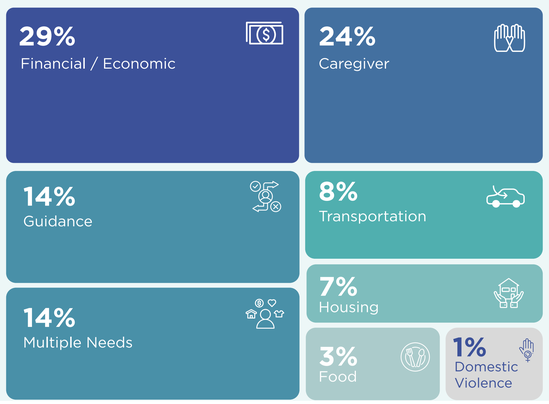
At baseline, **62.8%** of patients reported high loneliness, whereas **8.0%** reported low loneliness



Social Worker Support

Service Utilization

A licensed social worker was integrated early in Q2 2026, **reaching 76 patients**. The most prevalent documented social needs were:



Discussion

This pilot demonstrates feasibility and preliminary effectiveness of embedding dietitian, emotional support, and social work services within a specialty pharmacy for oncology patients in Puerto Rico. Nutritional risk shifted substantially toward lower-risk categories (85% malnutrition reduction) with high goal attainment. GI symptom stabilization/improvement suggests dietitian-led interventions may support treatment tolerance and chemotherapy adherence. High baseline anxiety and depression, consistent with oncology distress literature and NCCN screening recommendations, decreased meaningfully at follow-up with integrated emotional support. Social work identified financial hardship and caregiver support as predominant unmet needs, reflecting socioeconomic challenges in this population.

Limitations

This descriptive, single-site pilot without a control group precludes causal inference; the short evaluation period, pre-post design, variable sample sizes, and later social work integration warrant cautious interpretation. Future evaluations should incorporate longer follow-up, validated adherence measures, and controlled comparisons.

Conclusions

This pilot provides early evidence that integrating nutrition, emotional support, and social work services within a specialty pharmacy for oncology patients in Puerto Rico is **feasible and impactful.** Preliminary outcomes demonstrate **favorable shifts in nutritional risk, psychological distress, and identification of actionable social needs.** These findings support medically integrated pharmacy models addressing holistic oncology care in underserved Hispanic/Latino populations; larger-scale controlled evaluations are warranted.

References

1. Physician-Pharmacy Integration in Cancer Care: Pillars of Medically Integrated Pharmacy. Doshi GK, Gordan L, Hanna K, et al. The American Journal of Managed Care. 2025;31(12):e353-e356. doi:10.37765/ajmc.2025.89839.
2. Supportive Care: The "Keystone" of Modern Oncology Practice. Scotté F, Taylor A, Davies A. Cancers. 2023;15(15):3860. doi:10.3390/cancers15153860.
3. Enhancing Cancer Supportive Care: Integrating Psychosocial Support, Nutrition, and Physical Activity Using Telehealth Solutions. Bergerot CD, Bergerot PG, Philip EJ, et al. JCO Global Oncology. 2024;10:e2400333. doi:10.1200/GO-24-00333.
4. Medically Integrated Dispensing Pharmacy: ASCO-Network for Collaborative Oncology Development & Advancement Standards Update. Raez LE, Gregg XT, Doshi GK, et al. JCO Oncology Practice. 2025;:OP2500279. doi:10.1200/OP-25-00279.
5. Models of Supportive Care in Oncology. Hui D, Hoge G, Bruera E. Current Opinion in Oncology. 2021;33(4):259-266. doi:10.1097/CCO.0000000v0000000733.
6. Distress Management. National Comprehensive Cancer Network. Updated 2026-04-24.
7. Patient-Centered Standards for Medically Integrated Dispensing: ASCO/NCODA Standards. Dillmon MS, Kennedy EB, Anderson MK, et al. Journal of Clinical Oncology : Official Journal of the American Society of Clinical Oncology. 2020;38(6):633-644. doi:10.1200/JCO.19.02297.