

# A Contemporary Approach to Determining Health Care Resource Utilization (HCRU) Among Cancer Patients



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## Plain language summary



### Why we perform this research?

To understand expenditure in supportive cancer care programme



### What were the findings of this research?

SF-6D gain leads up to high reduction in medical expenditures



### How we perform this research?

We analyzed patient reported outcome measures (PROMs) for patients who received a supportive cancer care intervention



### What are the implications of this research?

These insights can help improve personalized, cost-effective, and fair cancer care.

## Introduction

- Increase in cancer incidence and survivorship increases costs and pressures on healthcare systems.<sup>1</sup>
- Cancer care drives high health care resources utilization (HCRU) => Can reach \$155,029/patient in 6-month period.<sup>2</sup>

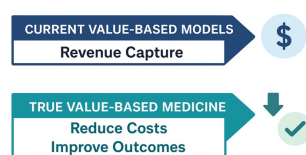


Figure 1: Link between current-value based models with true based medicine

## Objective

- To evaluate medical expenditure savings in a multidisciplinary supportive cancer care program.
- Real world evidence (RWE) is necessary for purchasers of value-based oncology models. However, those rarely incorporate standard PROMs that capture economic impacts of supportive cancer care.



Figure 2: Supportive and palliative care components in cancer patients

## Methodology

- Patients received a multidisciplinary **supportive cancer care intervention** including mental health, nutrition support, and occupational therapy.
- Baseline and follow-up scores were collected approximately **10 weeks** from intervention start, representing approximately **9 clinical visits**. SF-12v2 and SF-6D algorithms evaluated intervention responses and HCRU.

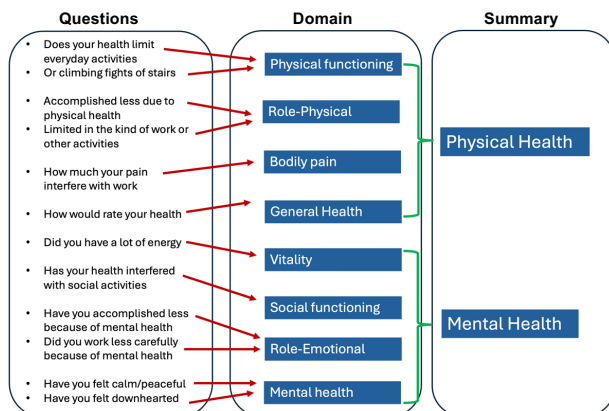


Figure 3: Representation of different domains of SF-12v2 and SF-6D

## Results

- Among 185 participants (mean age 52; 84% female), **35% were in active treatment, 21% on hormonal therapy, and 65% post-treatment**. Patients completed SF-12v2 at baseline and follow-up.
- The average increase in **SF-6D score** was **+0.051** (baseline: 0.597; follow-up: 0.648).
- This level of score improvement exceeds published estimates of clinically meaningful changes.<sup>3,4,5</sup>

### AVOIDING DECLINE



Figure 4: Impact of early care on reducing decline and healthcare use

- Avoiding decline reduces extra doctor visits, hospitalizations, and severe symptom days.
- Tracking healthcare use helps spot early signs of decline.
- Early care keeps patients healthier and lowers resource use.

### Clinical Outcomes by SF-6D Domains

- When health status remains stable, physical, emotional, and social functioning are preserved, allowing patients to keep doing what matters most to them.
- **Stability of health status reflects disease control and preserved quality of life.**
- Avoiding decline often means avoiding additional medical visits, hospitalizations, and high-symptom days.

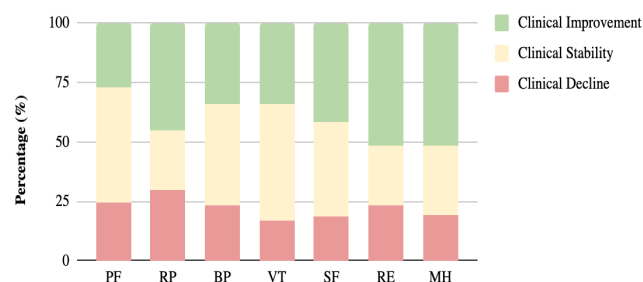


Figure 5: Clinical Outcomes by SF-6D Domains

Physical Functioning (PF), Role Physical (RP), Bodily Pain (BP), Vitality (VT), Social Functioning (SF), Role Emotional (RE), Mental Health (MH)

## Conclusions

For cancer patients, a **+0.051 SF-6D gain = 8% to 30% reduction** in medical expenditures.<sup>1,2</sup>

Clinically meaningful **PROM gains** → **Better Patient Outcomes and Efficiency** → **Reduced HCRU**.

Real world evidence supports payer decision-making, value-based contracts, and health technology assessment (HTA) priorities.

## References



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