

Supportive Oncology Care at Home for Recently Hospitalized Patients with Advanced Cancer

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BACKGROUND & OBJECTIVES

Patients with advanced cancer often experience frequent and prolonged hospitalizations, and **the transition from hospital to home represents a critical period for these individuals**, as they prefer to maximize time at home and avoid hospital readmissions.

We sought to demonstrate the feasibility and acceptability of a Supportive Oncology Care at Home intervention to address the post-discharge needs of recently hospitalized patients with advanced cancer.

METHODS

- Adult, English-speaking patients with advanced solid tumors experiencing their second or later unplanned hospitalization and residing within a 50-mile radius of Massachusetts General Hospital (MGH) were eligible for the study. Additionally, patients who were discharged home with hospice care were ineligible.
- The open pilot phase involved 10 patients undergoing a two-week intervention, which was increased to a three-week intervention for the subsequent 20 patients based on participant feedback.
- The two and three-week intervention consisted of three parts:
 - A hospital in the home care model for proactive symptom assessment and management, including clinician visits to assess patients, draw labs, administer intravenous medications and hydration, and ensure optimal symptom management.
 - The remote monitoring of daily patient-reported symptoms, vital signs, and body weight.
 - Structured communication with the oncology team.
- The primary endpoint of the study was feasibility, defined as $\geq 60\%$ of approached and eligible patients enrolling and $\geq 60\%$ of participants completing daily symptom assessments.
- After intervention completion, patients rated the helpfulness and convenience of the intervention and symptom monitoring technology.

RESULTS

Figure 1: Example Intervention Flow

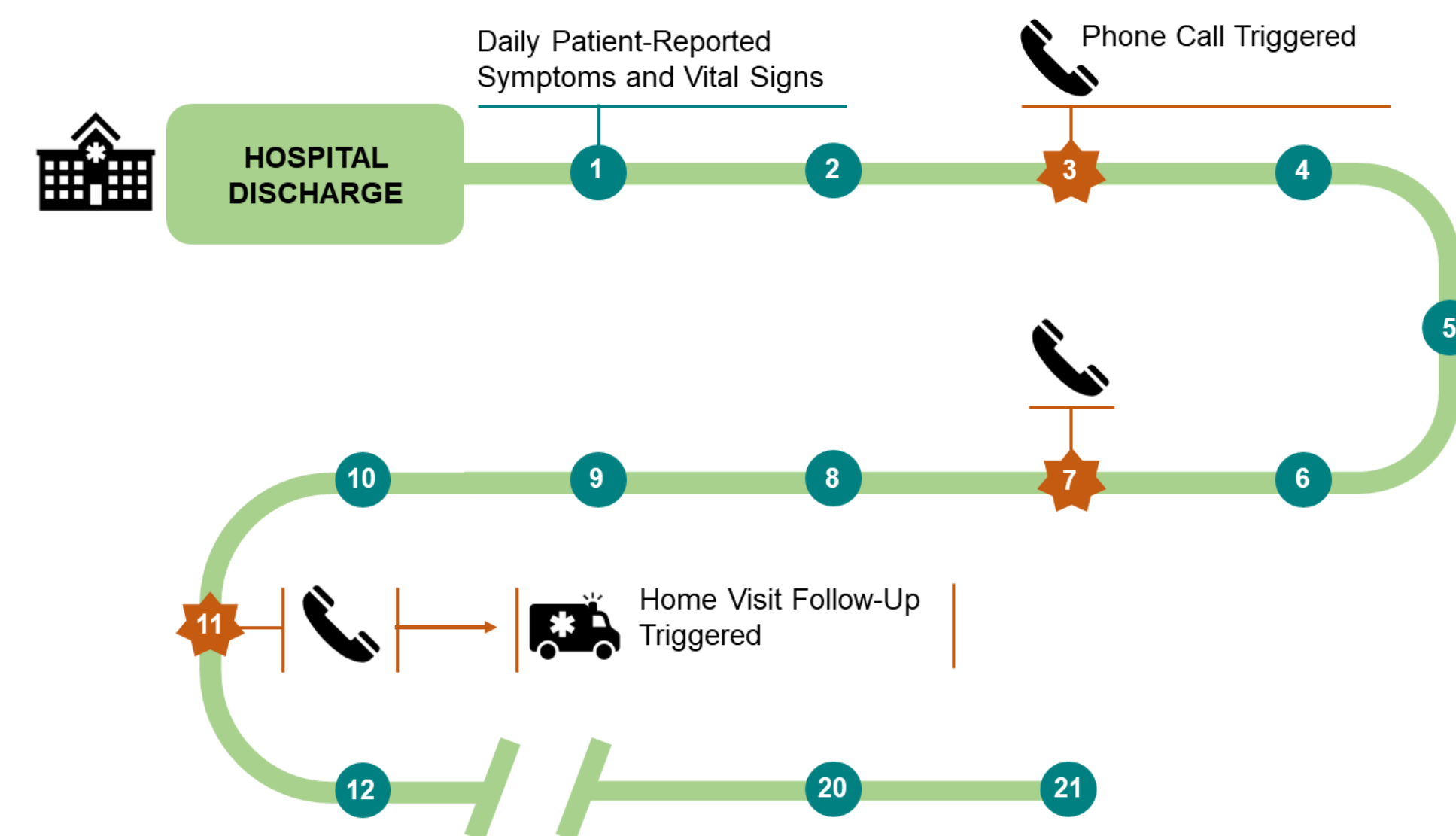


Figure 2: Flow Diagram

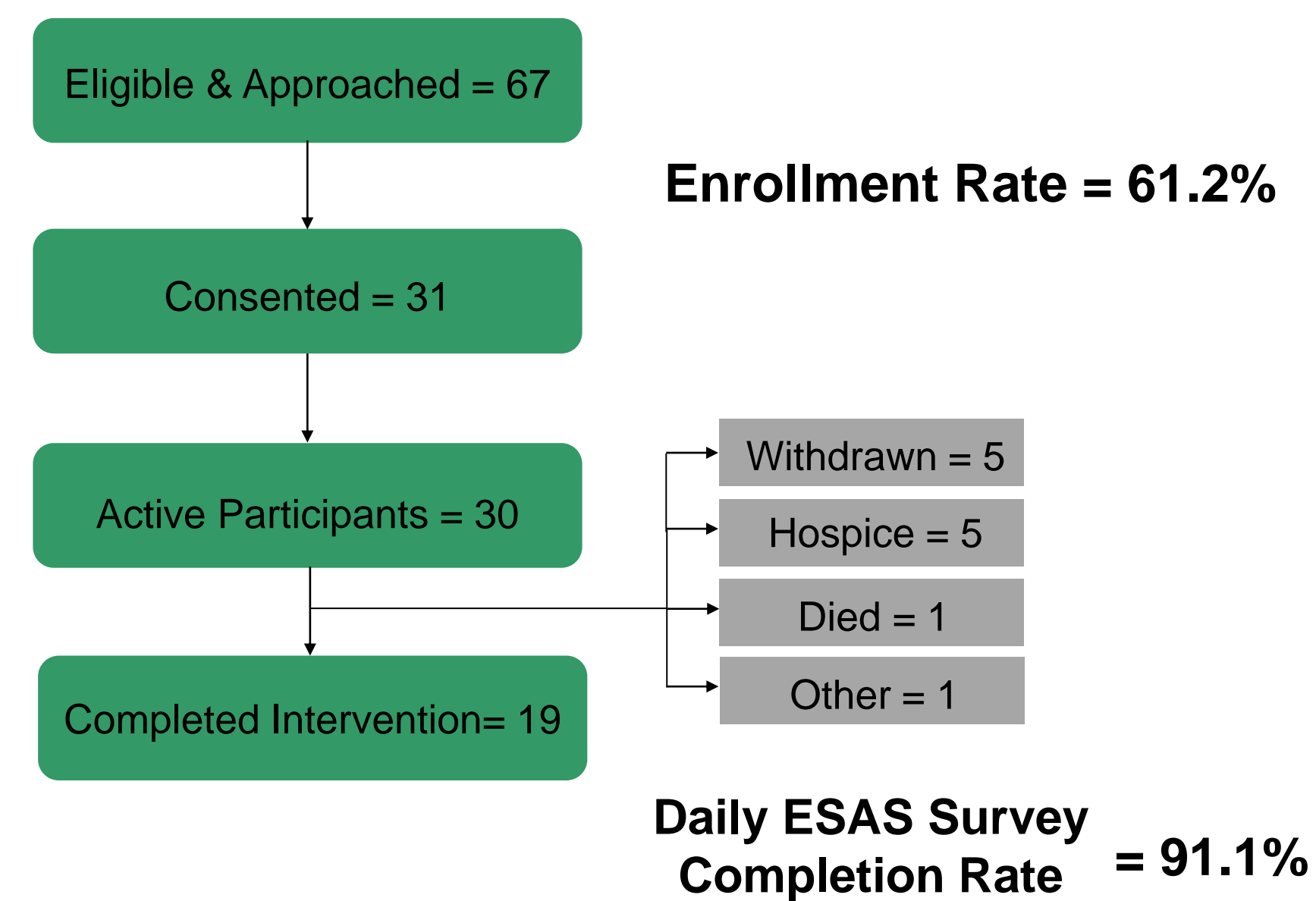


Table 1: Patient Demographics

OVERALL COHORT (n=30)	
Age (years) – median (range)	58 (31-84)
Female Sex – no. (%)	15 (50%)
Race – no. (%)	
White	23 (77%)
Black or African American	2 (7%)
Asian	3 (10%)
Hispanic or Latino	2 (7%)
Married – no. (%)	20 (67%)

Table 2: Patient Characteristics

CLINICAL AND ONCOLOGIC FACTORS		
Diagnosis – no. (%)		
Gastrointestinal	16 (53%)	
Genitourinary	6 (20%)	
Months since advanced diagnosis – median (range)		
	16 (0-68)	
Number of medications at discharge – median (range)		
	13 (5-22)	
BASELINE PATIENT REPORTED OUTCOMES		
Patient Reported Outcome	Measure Range	Median Baseline (n)
Patient-Reported Outcomes Measurement Information System – Self Efficacy (PROMIS – Self Efficacy)	16-80	63 (30)
Edmonton Symptom Assessment System (ESAS)	0-120	38.5 (30)
The Functional Assessment of Cancer Therapy – General (FACT-G)	0-108	68.4 (30)

Figure 3: Intervention Rate

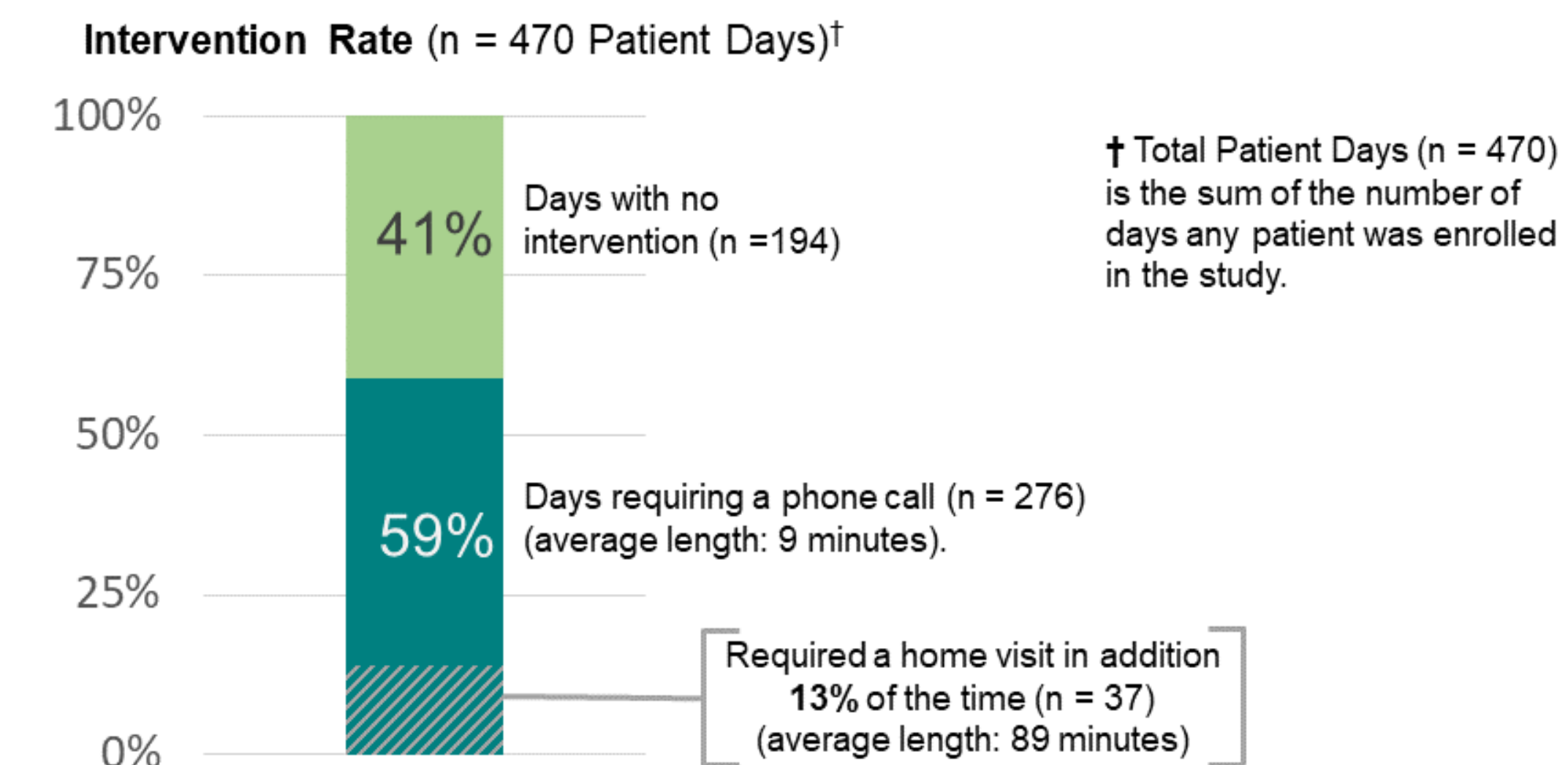
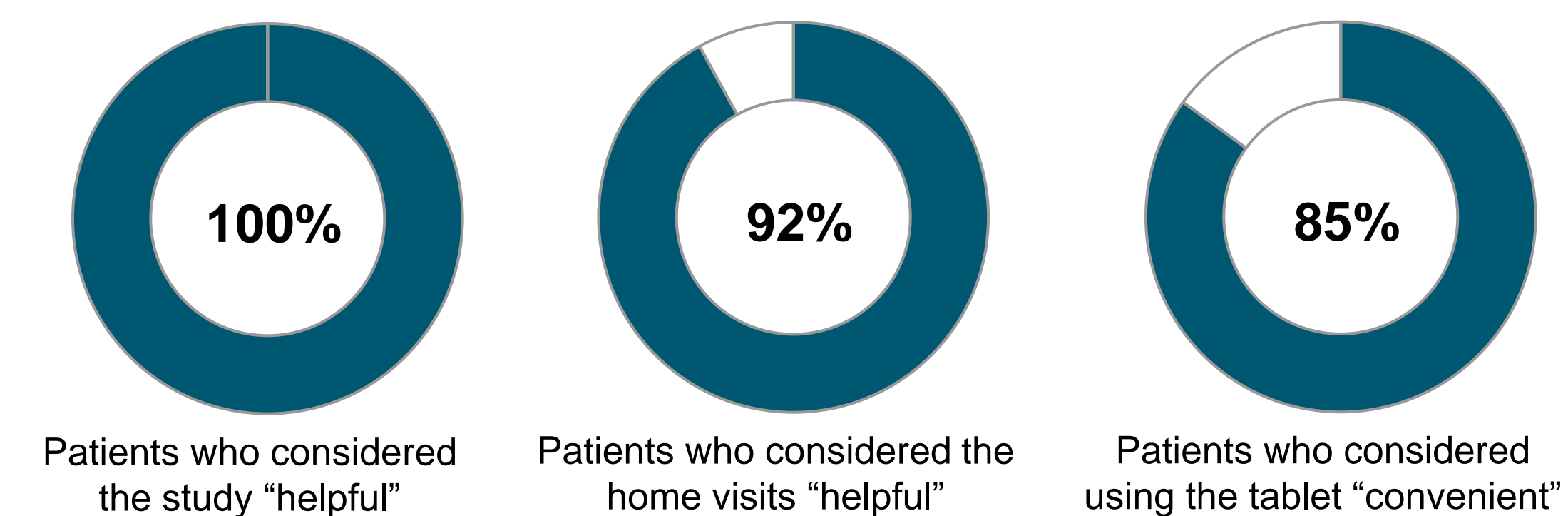


Figure 4: Intervention Acceptability



CONCLUSIONS

Delivering supportive oncology care at home for patients with advanced cancer is a **feasible** approach to delivering post-discharge care, with over 60% of approached patients agreeing to participate in the study and over 90% of them filling out daily symptom surveys and reporting vital signs

This care delivery model was an **acceptable** means of delivering post-discharge care, with almost all patients reporting that the intervention and its components were helpful.

On over half of days post-discharge, patients reported symptoms or concerns that triggered a clinician call, and 13% of those calls led to a home visit for evaluation and management of those symptoms

LIMITATIONS

- Small sample of mainly white and highly-educated patients at an academic medical center.
- The home-care model was limited to a small geographic region and could be difficult to replicate outside of urban areas.

FUTURE DIRECTIONS

A future randomized controlled trial will compare the Medically-Home Post-Discharge intervention against standard of care to study whether the intervention improves patients' quality of life and reduces health care utilization.

FUNDING & CONTACT

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