

Addressing financial concerns of cancer clinical trial participants: longitudinal outcomes of an equity intervention

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Background

- Cancer patients' financial concerns represent a barrier to clinical trial participation and interventions targeting the financial concerns of clinical trial participants are needed.

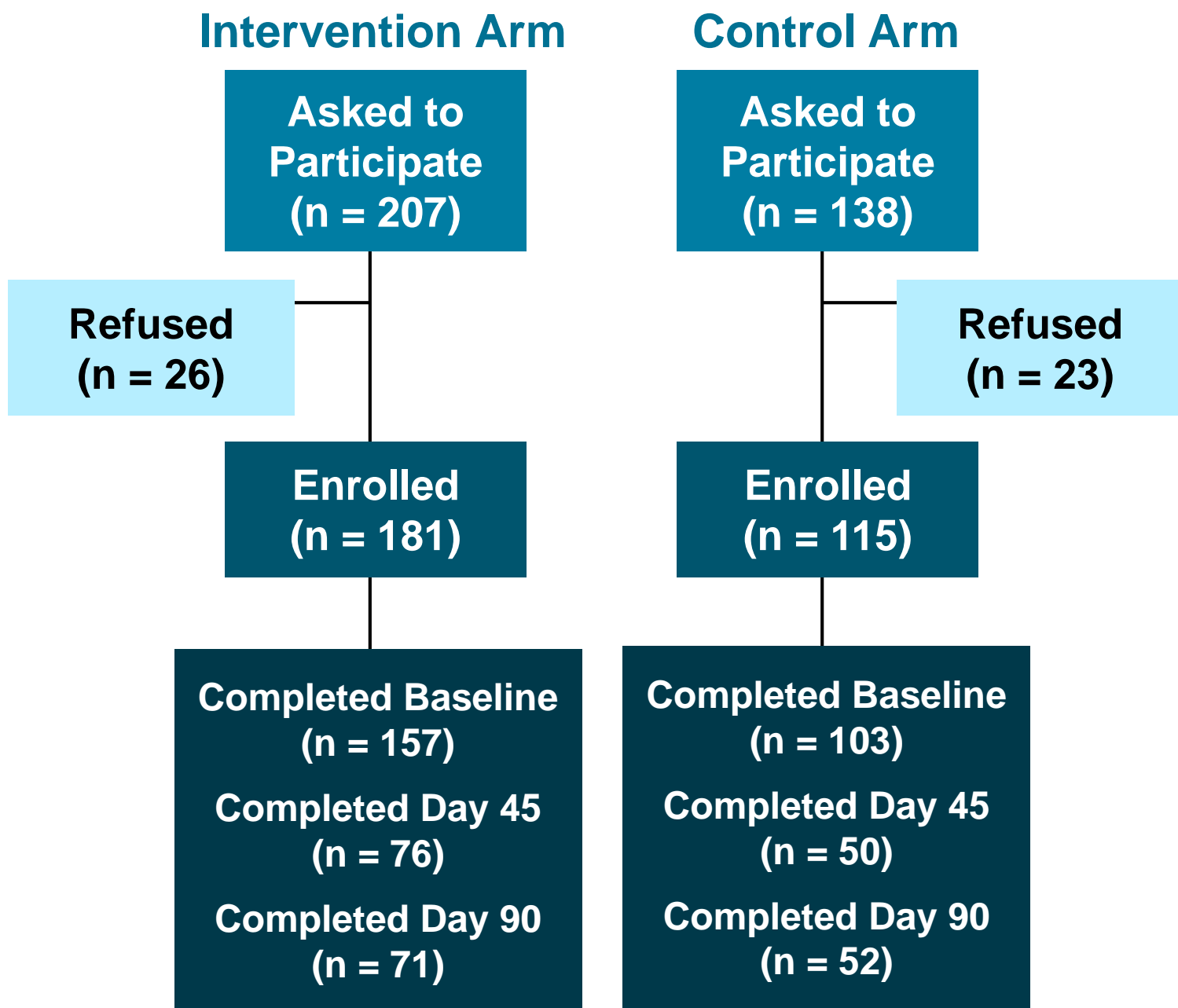
Objective

- We sought to assess the impact of an equity intervention on the financial concerns of clinical trial participants.

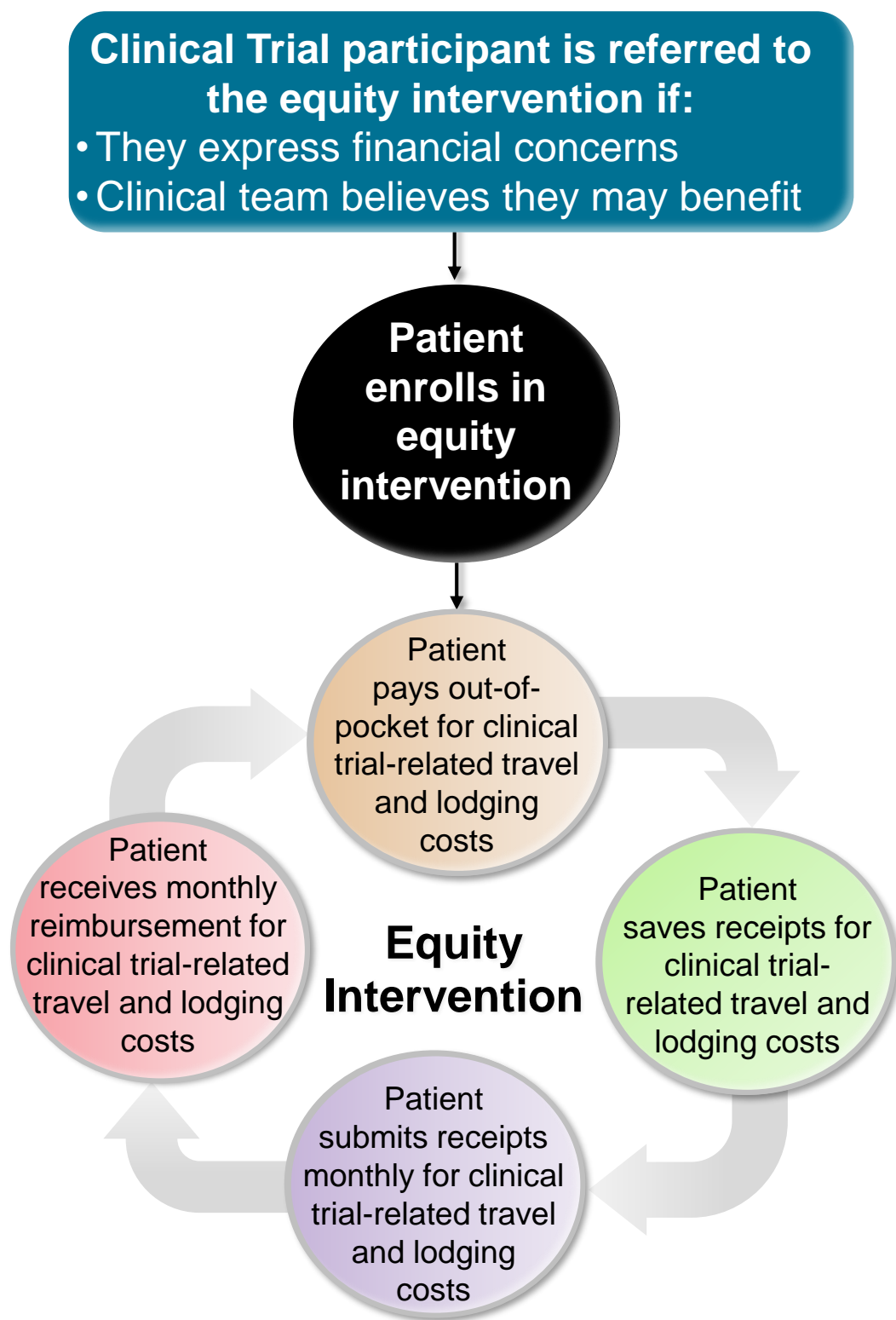
Methods

- We developed an equity intervention to reimburse non-clinical expenses related to clinical trials (e.g. travel, lodging) for patients.
- From 7/2015-7/2017, we surveyed intervention and control patients, matched by age, sex, cancer type, specific clinical trial and trial phase.
- We longitudinally assessed patients' financial concerns (cost concerns for trial-related travel and lodging), cost-coping strategies (e.g. altering medical care or lifestyle due to costs), and financial wellbeing (COST measure, scores range 0-44, with higher scores indicating better financial wellbeing) at baseline, day 45 and day 90.
- We used longitudinal models to assess intervention effects over time.

Flow Diagram



Intervention Details

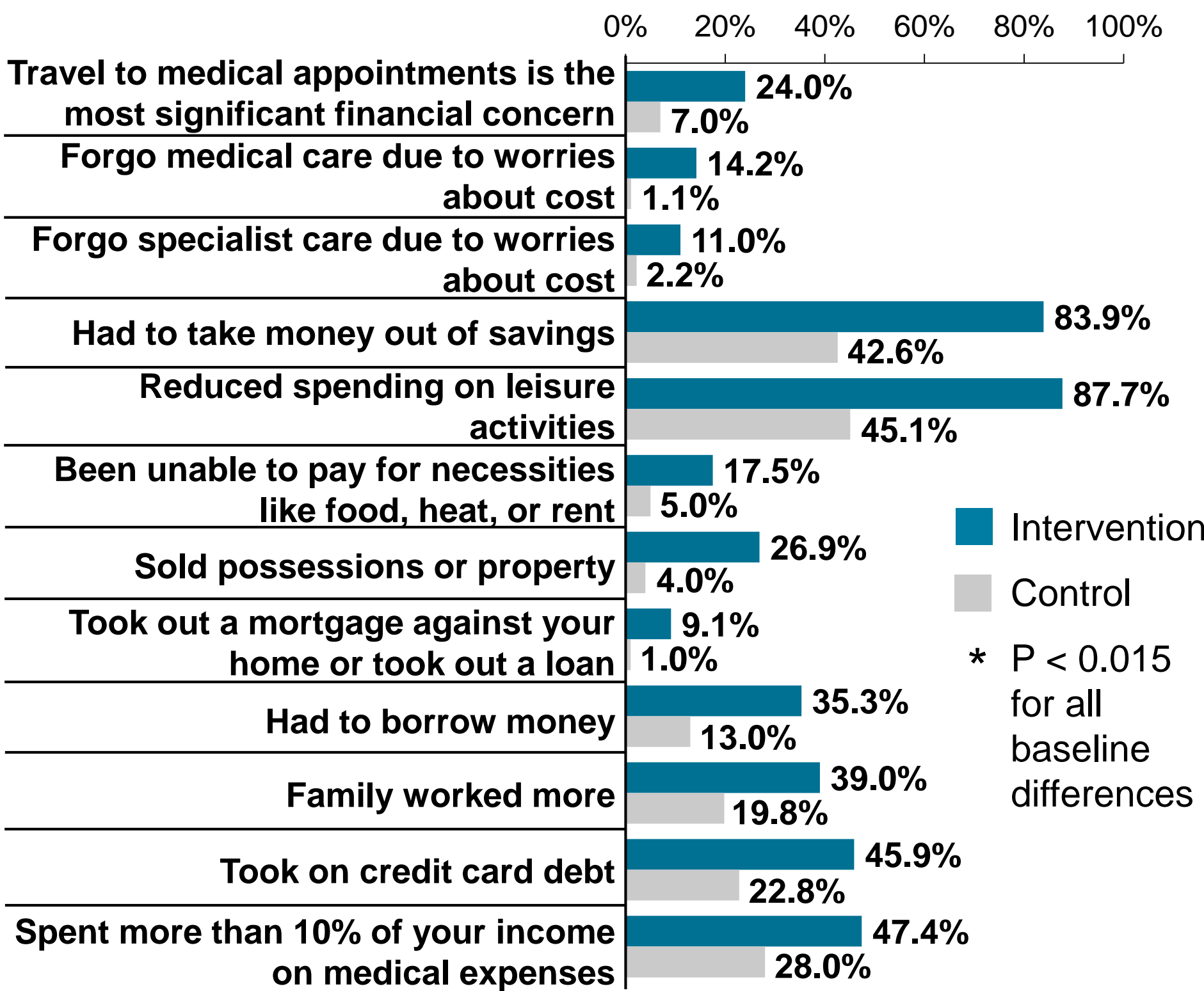


Results

Baseline Patient Characteristics

Characteristic	Intervention (N=157)	Control (N=103)	P
Age (Mean)	56.63	59.59	0.072
Female Sex, %	68.2%	63.1%	0.423
White Race, %	87.9%	92.2%	0.663
Household Income ≥ \$80k	29.3%	56.3%	<0.001
Married, %	69.4%	77.7%	0.543
Cancer Type, %			0.181
Thoracic	18.5%	21.4%	
Breast	12.1%	24.3%	
Gastrointestinal	12.7%	11.7%	
Hematologic	17.2%	10.7%	
Other	39.5%	31.9%	
Stage IV Disease	63.1%	73.8%	0.071
Phase I Trial	71.3%	72.8%	0.685

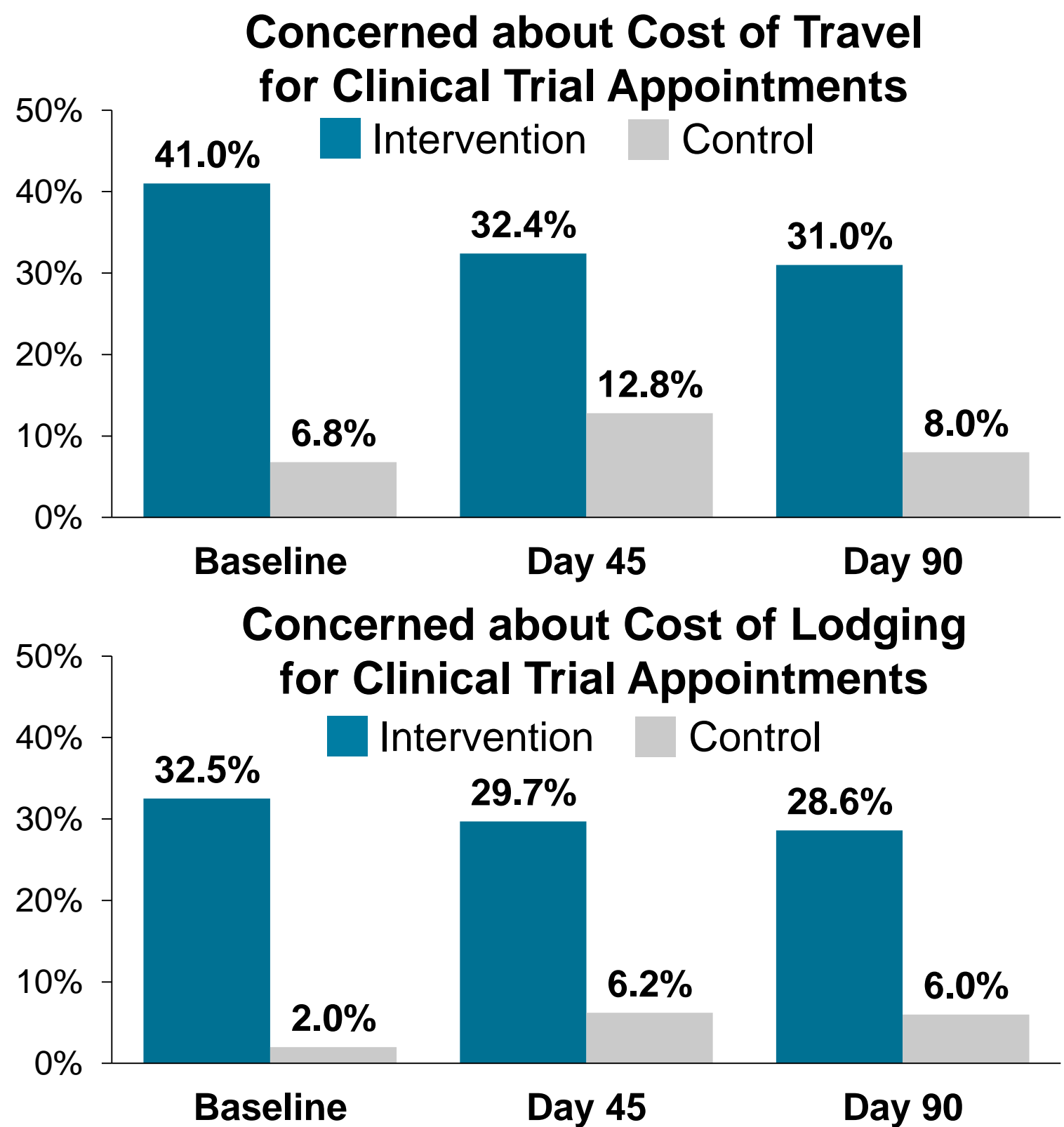
Baseline Financial Concerns



Longitudinal Intervention Effects

Outcome	Baseline		Day 45		Day 90		Time	Intervention vs Control	Time x Intervention
	N	%	N	%	N	%	P	P	P
Concerned about the cost of travel for a clinical trial									
Intervention	64	41.0%	24	32.4%	22	31.0%	0.240	<0.001	0.010
Control	7	6.8%	6	12.8%	4	8.0%			
Concerned about the cost of lodging for a clinical trial									
Intervention	50	32.5%	22	29.7%	20	28.6%	0.305	<0.001	0.003
Control	2	2.0%	3	6.2%	3	6.0%			
Travel to medical appointments is the most significant financial concern									
Intervention	36	24.0%	18	24.3%	17	24.6%	0.189	0.002	0.213
Control	7	7.0%	4	8.7%	9	17.3%			
COST Score									
	Mean	SD	Mean	SD	Mean	SD			
Intervention	15.32	9.11	16.39	9.39	16.07	9.35	0.120	<0.001	0.104
Control	23.88	10.21	23.62	10.37	25.12	9.76			

Changes in Cost Concerns



Conclusions

- At baseline, intervention patients had worse financial wellbeing than control patients, yet over time, intervention patients experienced greater improvements in their financial concerns about clinical trial-related travel and lodging compared with control patients.
- Our findings highlight the substantial financial concerns of cancer clinical trial participants, and demonstrate the potential for interventions to address these concerns and enhance access to clinical trial participation for patients with cancer.
- Future Steps
 - Further research is needed to assess and address financial barriers to cancer clinical trial participation.
 - Larger, multi-site trials are needed to confirm our results and demonstrate the impact of this intervention on patients' financial concerns, as well as other important outcomes such as psychological distress and quality of life.