

A health insurance navigation intervention tool (HINT) for survivors of childhood cancer

*Randomized pilot trial results from the Childhood Cancer Survivor Study
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Health Insurance Coverage in Survivors of Childhood Cancer: The Childhood Cancer Survivor Study

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A B S T R A C T

Purpose

To examine the prevalence and predictors of health insurance coverage and the difficulties obtaining coverage in a large cohort of childhood cancer survivors.

Patients and Methods

This study included 12,358 5-year survivors of childhood cancer and 3,553 sibling controls participating in the Childhood Cancer Survivor Study. Data were collected by surveys distributed in 1994 (baseline) and 2000 (follow-up).

Results

At baseline, 83.9% of adult survivors, compared with 88.3% of siblings, had health insurance coverage ($P < .01$); 6 years later, small but significant survivor-sibling differences remained (88% v 91%; $P < .01$). Twenty-nine percent of survivors reported having had difficulties obtaining coverage, compared with only 3% of siblings ($P < .01$). In multivariate analysis of survivors 18 years of age or older, factors associated with being uninsured included younger age at diagnosis (diagnosis age of 0 to 4 years; odds ratio [OR] = 1.7; 95% CI, 1.3 to 2.2), male sex (OR = 1.3; 95% CI, 1.2 to 1.5), age at baseline survey (age 22 to 24 years; OR = 1.6; 95% CI, 1.2 to 2.1), lower level of attained education (less than high school, OR = 2.6, 95% CI, 2.1 to 3.3; high school graduate, OR = 2.1, 95% CI, 1.8 to 2.5), income less than \$20,000 (OR = 5.6, 95% CI, 4.5 to 7.1), marital status (widowed/divorced/separated; OR = 1.3; 95% CI, 1.1 to 1.6), smoking status (current smoker, OR = 2.0, 95% CI, 1.7 to 2.3; former smoker, OR = 1.4, 95% CI, 1.2 to 1.8), and treatment that included cranial radiation (OR = 1.3, 95% CI, 1.0 to 1.6).

Conclusion

Compared with siblings, adult survivors of childhood cancer had significantly lower rates of health insurance coverage and more difficulties obtaining coverage. Since lack of coverage likely has serious health and financial implications for this at-risk population, any disparity in availability and quality of coverage is of great concern.

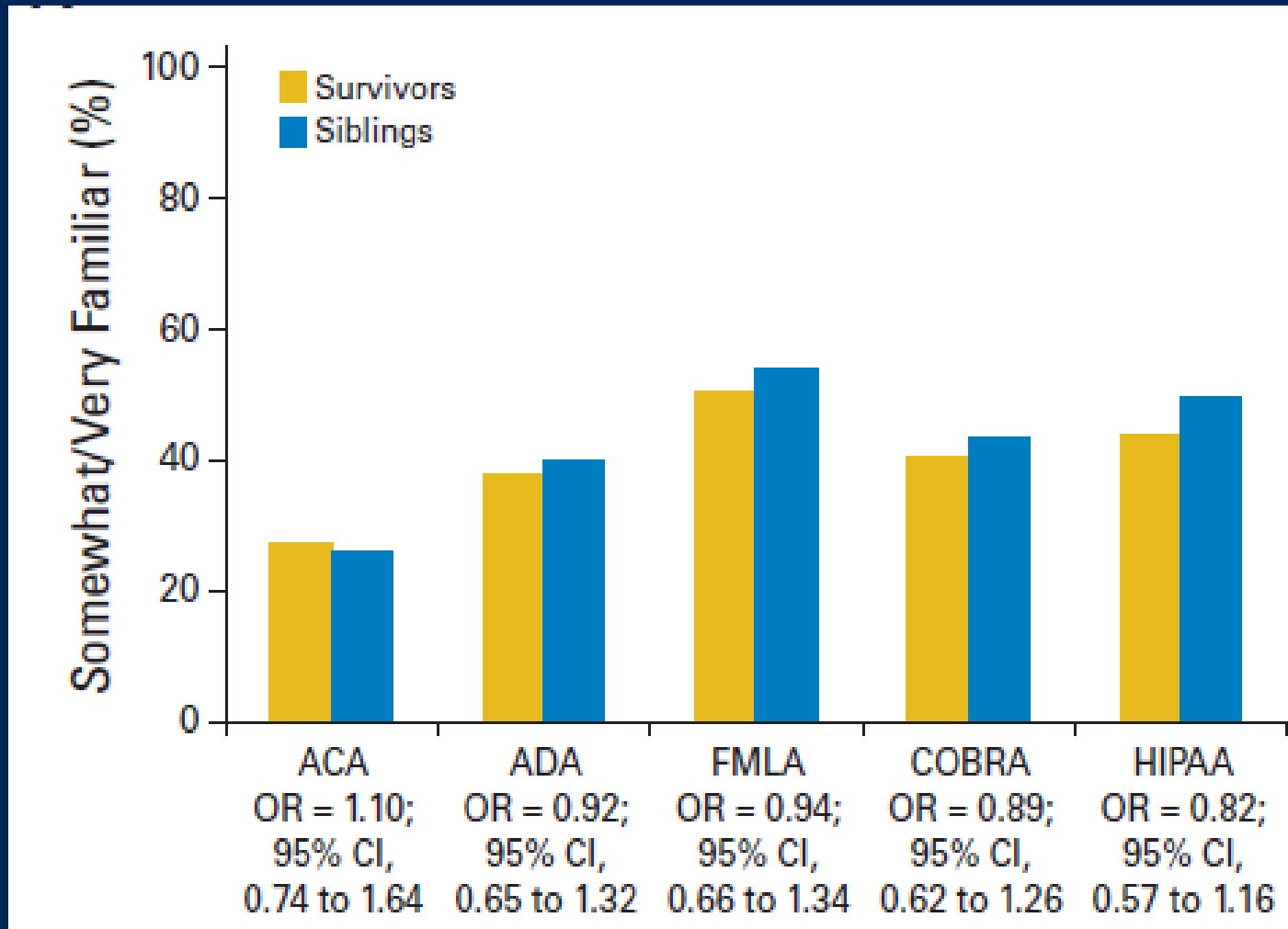
J Clin Oncol 23:9187-9197. © 2005 by American Society of Clinical Oncology

CHILDHOOD
CANCER
SURVIVORS WERE
MORE LIKELY TO BE
UNINSURED THAN
THEIR SIBLINGS.

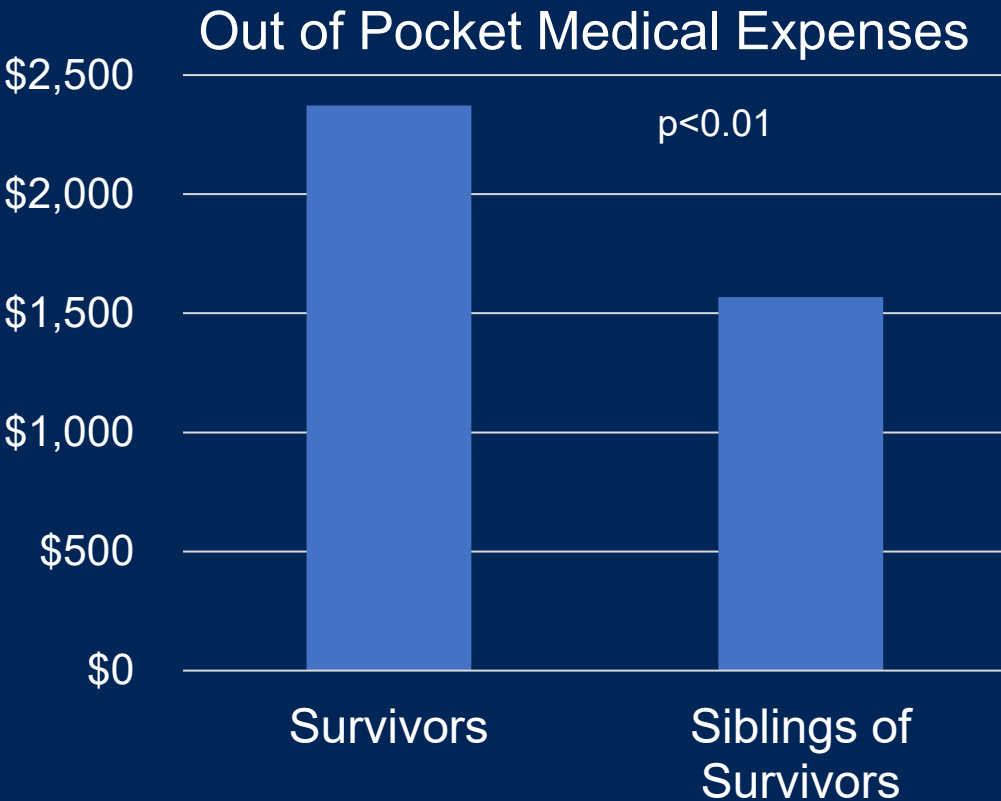
UNDERINSURANCE

- Out-of-pocket costs
- % of income spent on healthcare
- Prescriptions not filled

FAMILIARITY WITH ACA AND POLICIES



SURVIVORS' OUT OF POCKET COSTS & IMPACT



	Survivors	Siblings	OR (95% CI)
Had to borrow money	117 (17.3%)	18 (9.1%)	1.84 (1.03-3.28)
Worry about not being able to get a needed medical procedure	135 (20.6%)	27 (12.4%)	1.80 (1.09-2.98)
Did not fill a prescription	107 (15.7%)	19 (9.0%)	1.74 (1.01-3.04)

Assessing Health Insurance Coverage Characteristics and Impact on Health Care Cost, Worry, and Access: A Report From the Childhood Cancer Survivor Study

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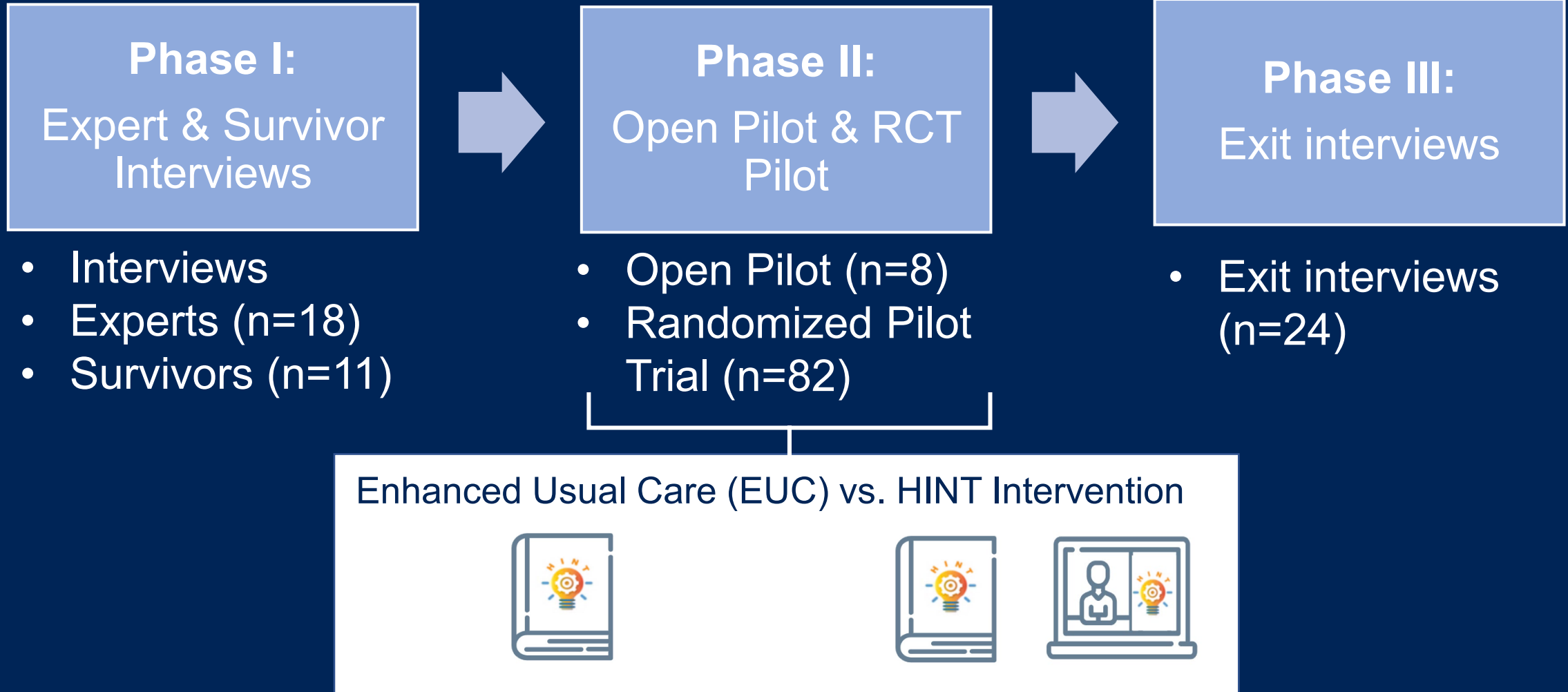
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SPECIFIC AIMS

- Aim 1: To develop a psychoeducational health insurance navigation program
- Aim 2: To conduct a videoconferencing-based pilot randomized trial of the program
- Aim 3: To refine the program for future use
- CCSS participants who were insured & had wireless access were eligible



STUDY DESIGN



HINT INTERVENTION

4 BIWEEKLY SESSIONS

- **SESSION 1: Learning About Survivorship Healthcare Needs**
- **SESSION 2: Learning About Your Plan In Relation to Policy**
- **SESSION 3: Overcoming Obstacles within Your Plan**
- **SESSION 4: Managing Care Costs**



PRIMARY OUTCOMES: FEASIBILITY & ACCEPTABILITY

The percent of
eligible patients
who enrolled

The number of
HINT sessions
completed

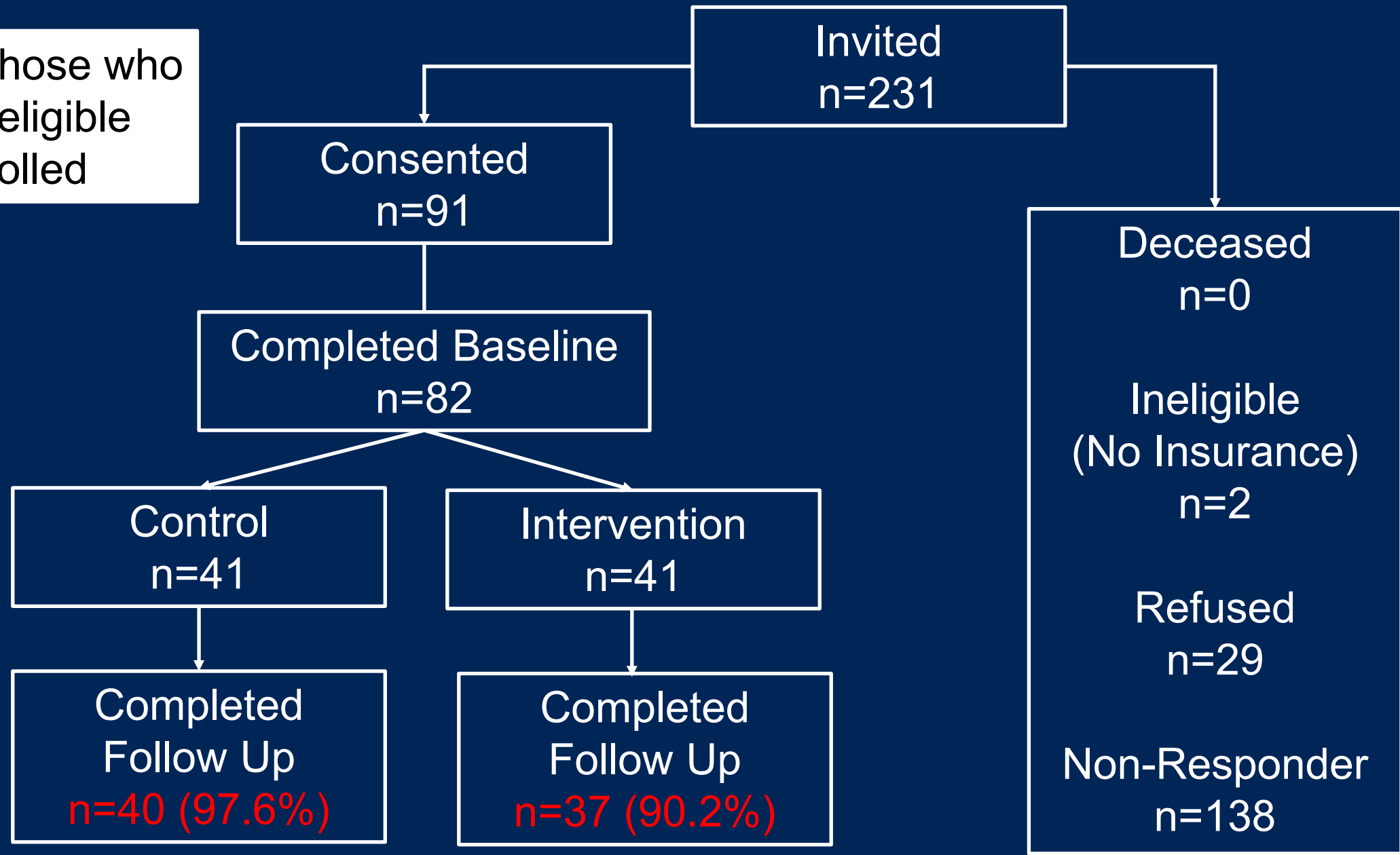
The percent of
follow up surveys
completed

Satisfaction

SECONDARY OUTCOME: EFFICACY

- Assessed at baseline and 5-months post enrollment
- **Health insurance literacy** (16-items: knowledge and confidence with health insurance terms and activities)
- **Financial burden** related to medical costs (7 items: worry due to medical costs)
- **Familiarity with healthcare reform policies** (8 items ACA provisions)
- **Satisfaction** with health insurance coverage

39% of those who were eligible enrolled



Consented
n=91

Completed Baseline
n=82

Control
n=41

Intervention
n=41

Completed Follow Up
n=40 (97.6%)

Completed Follow Up
n=37 (90.2%)

Invited
n=231

Deceased
n=0

Ineligible
(No Insurance)
n=2

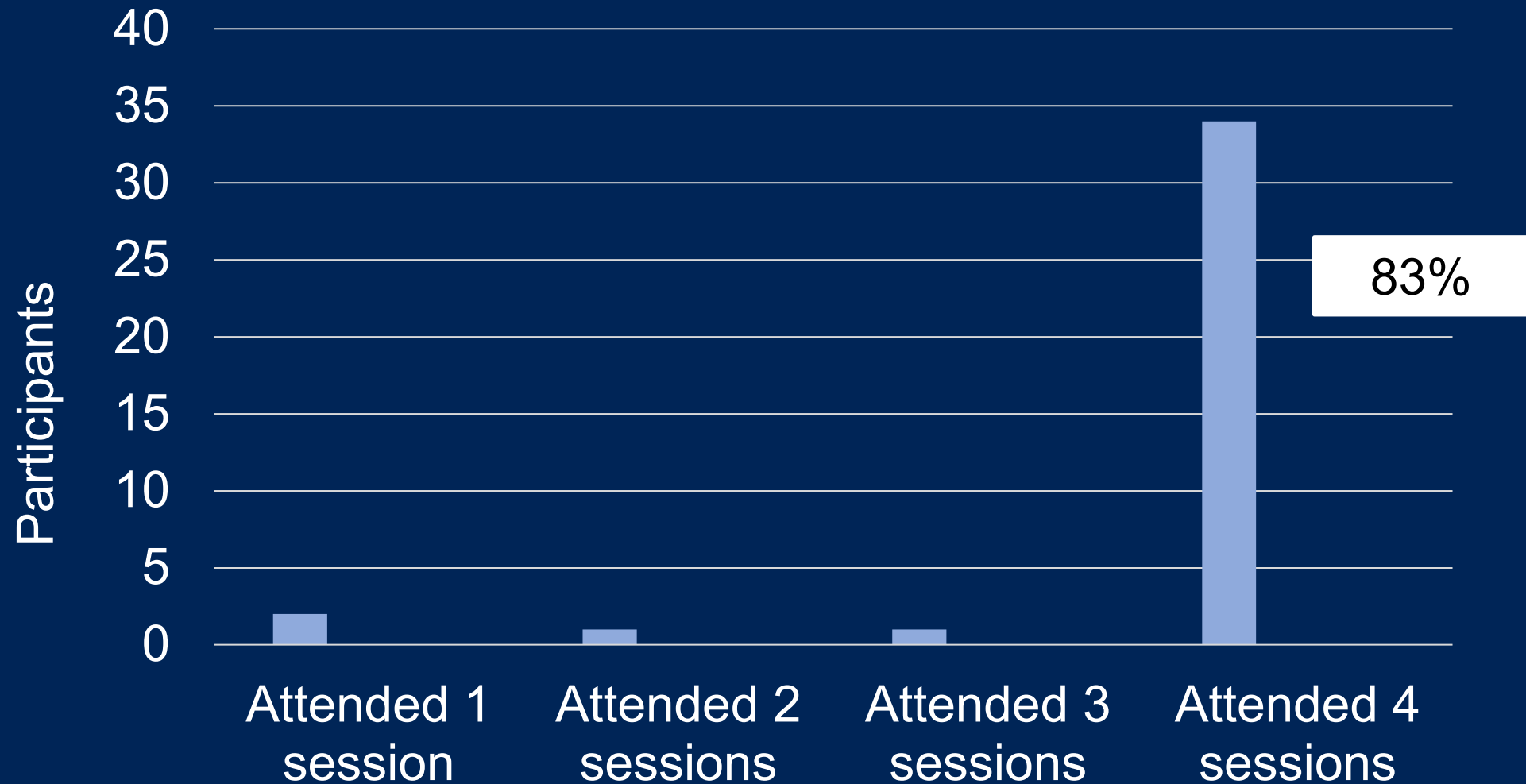
Refused
n=29

Non-Responder
n=138

HEALTH INSURANCE DESCRIPTIVES (n=82)

	N	%
Health Insurance Coverage		
Employer sponsored	62	75.6
Individual insurance	14	17.1
Medicare	4	4.9
Medicaid/state public insurance	7	8.5
Medicaid Expansion State		
Yes	47	57.3
No	35	42.6
Who is the policy holder for your <u>primary</u> health insurance plan?		
You (Self)	60	73.2
Spouse / Partner	19	23.2
Parent	3	3.7

HINT INTERVENTION SESSIONS COMPLETED



HINT INTERVENTION ACCEPTABILITY

Satisfaction with program (range 8-40)	Mean=37.2 (SD=4.1)
Would you recommend the program	%
Definitely would recommend	65.7
Probably would recommend	20.0
Neutral	14.3
Program Helpful in meeting your health insurance needs (1-10)	Mean=8.9 (SD=1.2)

MULTIVARIABLE RESULTS

	Intervention	Control	Multivariable Regression	
	Change Mean (SD)	Change Mean (SD)	Coefficient & 95% CI	P Values
Health Insurance Literacy (16-64)	-9.1 (7.6)	-1.8 (7.9)	-7.6 (-4.11, -11.1)	p<0.001
Key ACA Provisions (0-6)	1.7 (1.7)	0.48 (1.6)	1.2 (0.4, 2.0)	p<0.003
Behavioral Financial Hardship (0-8)	-0.7 (1.7)	-0.5 (2.2)	-0.2 (-1.0, 0.7)	p=0.728
Psychological Financial Hardship (0-6)	-0.7 (1.6)	0.2 (1.2)	-0.9 (-1.6, -0.3)	p<0.006
Rating of current insurance coverage (1-5)	-0.67 (1.2)	-0.1 (1.0)	-0.57 (-0.5, -1.1)	p=0.03

Lower scores confer improvements- except for ACA provisions.

CONCLUSIONS

- Findings affirm gaps in health insurance literacy and ACA knowledge among a national sample of insured long-term survivors.
- A targeted virtual health insurance navigation program is feasible and acceptable.
- Our findings indicate that a navigation program can improve health literacy and ameliorate financial burden.

NEXT STEPS

- NCI-funded Effectiveness-Implementation Trial
- 3 arm trial
- N= 520
- 18-month follow-up
- Outcomes
 - health insurance literacy
 - financial hardship
 - out-of-pocket costs
 - health care utilization

