

# Psychosocial Interventions to Improve Patient Reported and Clinical Outcomes to Decrease Cancer Disparities in Diverse Cancer Survivors

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SUPPORT / RESEARCH / THRIVE



# SURVIVOR POPULATION GROWS

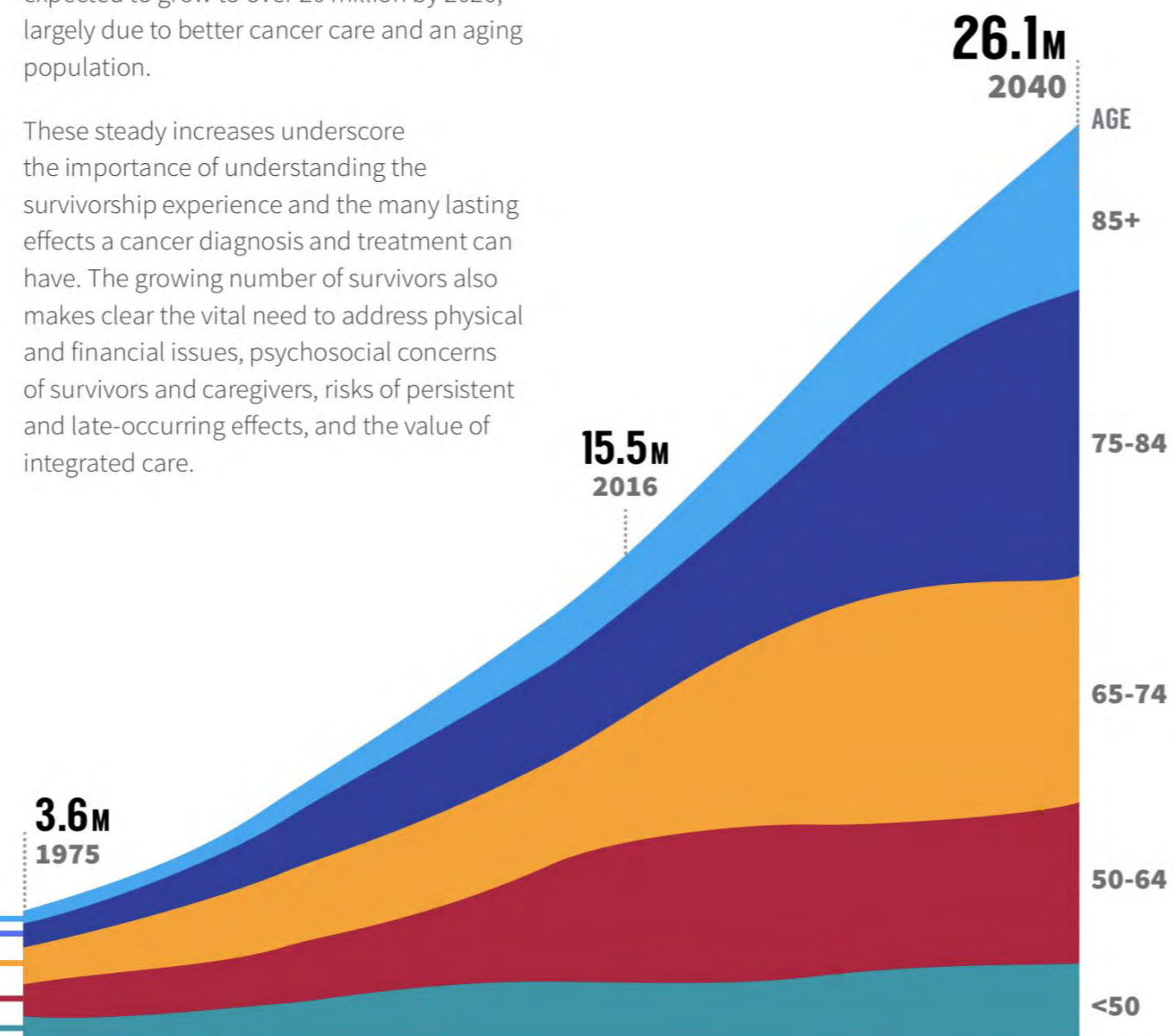
Improvements in screening and treatment have helped millions of people live many years after their cancer diagnosis. An estimated 15.5 million cancer survivors now live in the United States, and that number is expected to grow to over 20 million by 2026, largely due to better cancer care and an aging population.

These steady increases underscore the importance of understanding the survivorship experience and the many lasting effects a cancer diagnosis and treatment can have. The growing number of survivors also makes clear the vital need to address physical and financial issues, psychosocial concerns of survivors and caregivers, risks of persistent and late-occurring effects, and the value of integrated care.

**68%**  
5+ YEARS

**47%**  
10+ YEARS

**20%**  
20+ YEARS

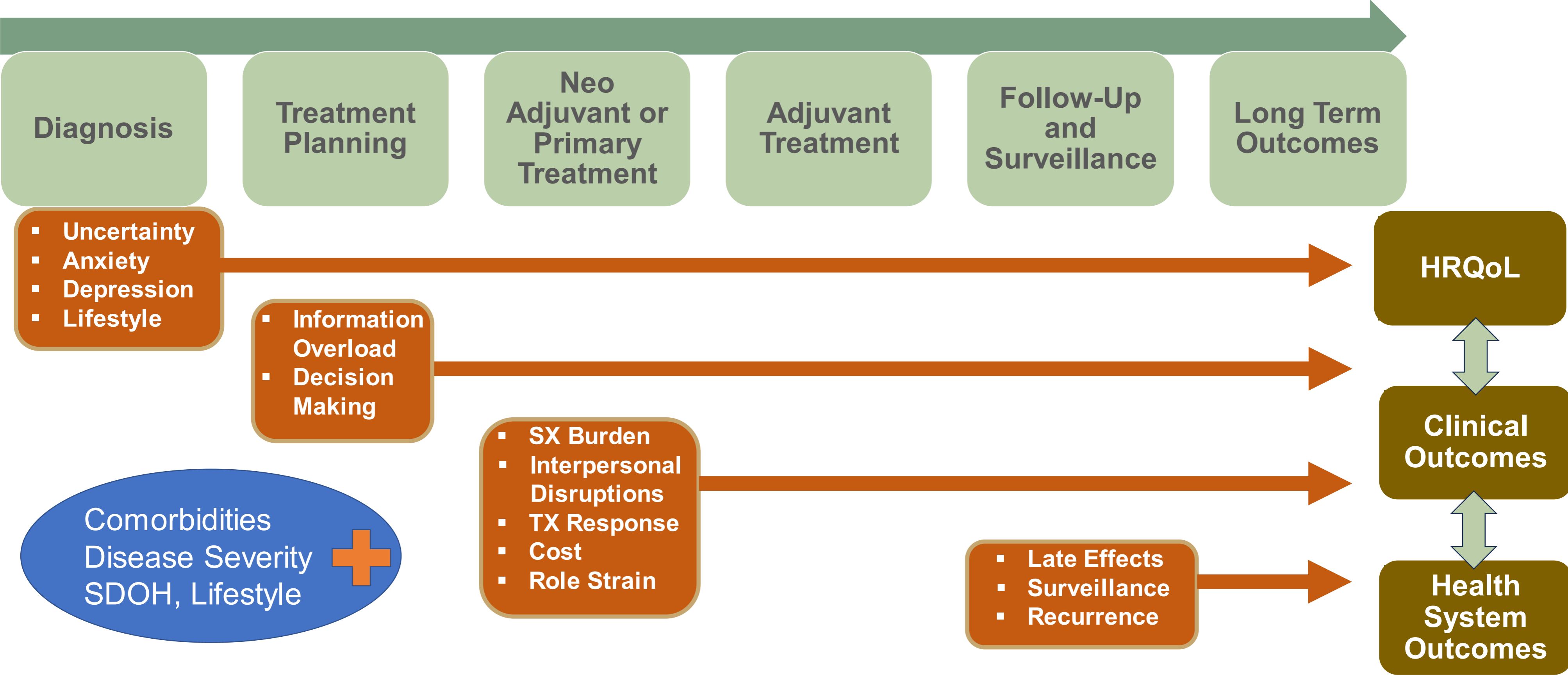


THE NUMBER OF CANCER SURVIVORS OVER TIME BY AGE

- Unprecedented growth in last 40+ yrs.
- Early detection & treatment efficacy
  - 20M Survivors; >26M in 2040
  - 5% of the US population
  - 64% are 65 or older\*
  - 20% are Hispanic/Latinos
- Survival benefit comes with challenges
  - Provider shortage
  - Chronicity of treatment side effects
  - Aging and comorbidities (67% 3 or >)
  - Care fragmentation
  - Limited access to primary care
  - Lifestyle factors contribute to disease burden, morbidity and mortality

**Multiple Challenges!**

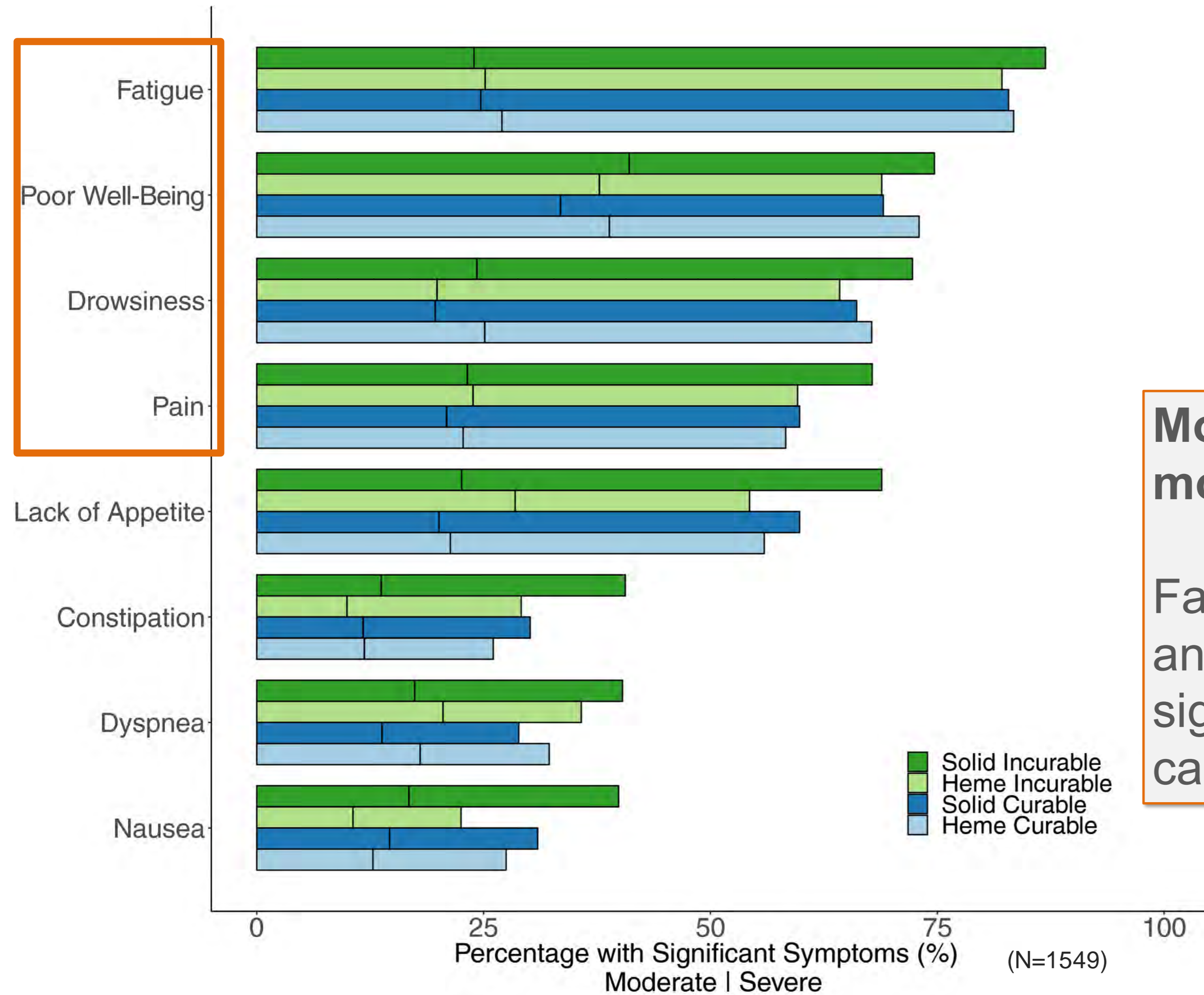
# Survivorship Experiences Across the Care Continuum



**Challenges are Prevalent, Underdetected and Undertreated**

(Penedo et al., 2020; Benedict, Walsh & Penedo, 2022; e.g., ASCO, COC, NCCN Guidelines)

# Physical Symptom Burden & Hospitalizations

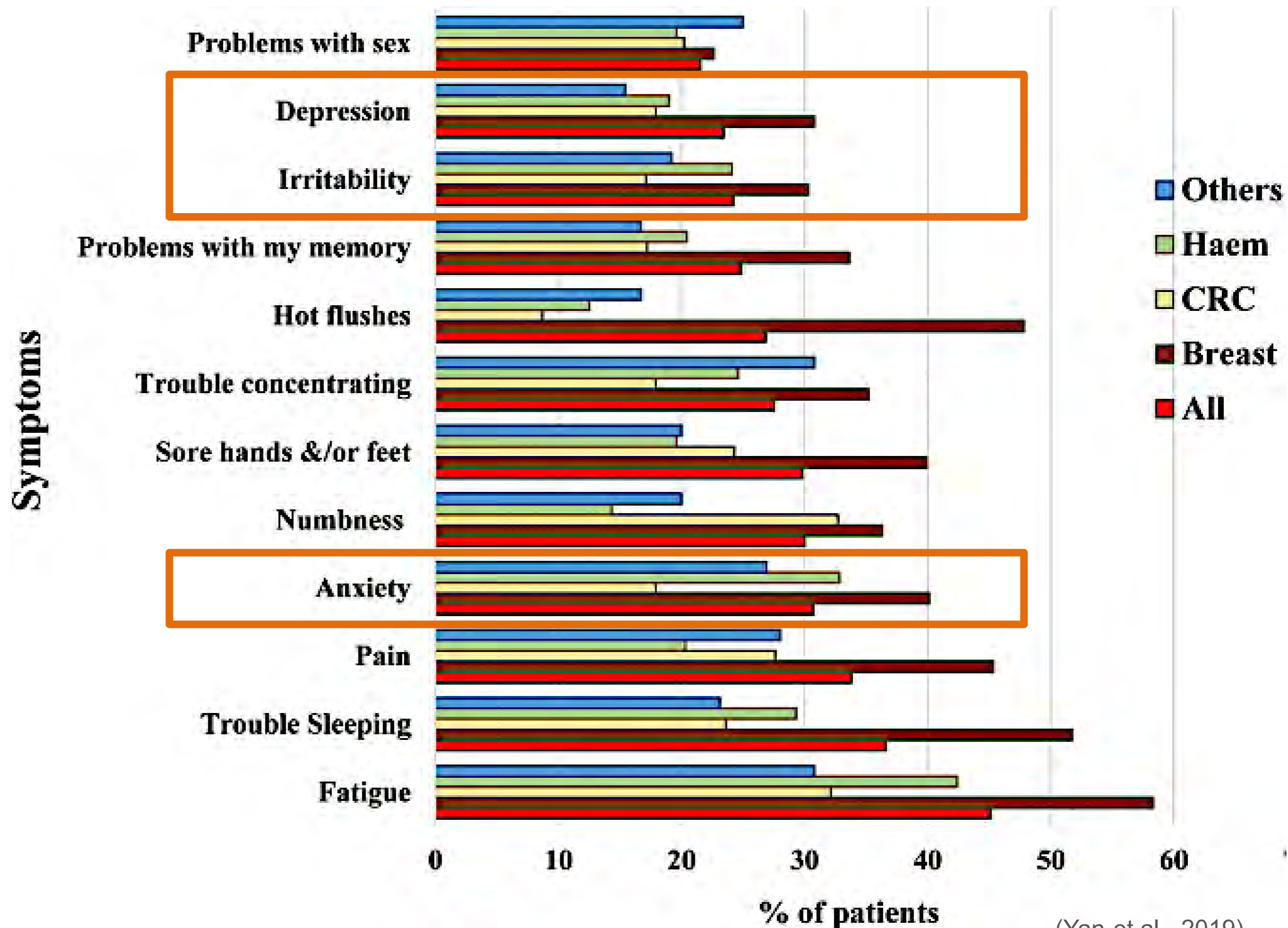


**Most patients reported moderate to severe:**

Fatigue, poor well-being, pain, and drowsiness with no significant differences noted by cancer type and treatment intent.

Prevalence of  
*Moderate or High*  
Severity Emotional  
Symptom Burden is  
Common

Anxiety (30-40%)  
Irritability (20-30%)  
Depression (<20-30%)



(Yan et al., 2019)

# High Rates of Unmet Needs are Common

- Over 10K adult survivors
- Breast, prostate, colorectal, melanoma, or hematological cancers

10%-70% endorsed concerns

40%-78% reported as unmet

Domain	No. of Responses	Concern Reported	Help Sought	Unmet Need Reported
<b>Physical concerns</b>				
Swelling	10 322	2411 (23)	1499 (64)	958 (40)
Fatigue	10 555	7210 (68)	2573 (36)	4702 (65)
Hormonal menopause	10 227	2663 (26)	1300 (49)	1417 (53)
Chronic pain	10 375	3573 (34)	2094 (61)	1530 (43)
Bladder incontinence	10 475	3716 (36)	2050 (58)	1650 (44)
Gastrointestinal tract problems	10 432	4108 (37)	2304 (56)	1521 (40)
<b>Nervous system problems</b>				
Change in concentration or memory	10 413	4108 (37)	1967 (50)	2123 (55)
Change in concentration or memory	10 426	4108 (37)	1016 (25)	3093 (75)
Change in concentration or memory	10 513	4748 (45)	1789 (39)	3027 (64)
<b>Emotional concerns</b>				
Depression	9700	4108 (37)	1459 (35)	3010 (67)
Anxiety	9925	4108 (37)	1996 (49)	4641 (68)
Change in relationship with family	10 632	3448 (32)	674 (21)	2679 (78)
Change in relationship with friends	10 577	2235 (21)	270 (13)	1851 (83)
Change in body image	10 594	4108 (37)	849 (22)	3152 (76)
Change in sexual intimacy	10 551	4488 (43)	1282 (30)	3151 (70)
<b>Practical concerns</b>				
Returning to work or school	10 388	2364 (23)	736 (32)	1625 (69)
Getting to and from appointments	10 521	2240 (21)	894 (43)	1229 (55)
Taking care of family	10 399	367 (2)	367 (2)	924 (69)
Difficulty getting health or life insurance	10 364	1642 (16)	457 (30)	1192 (73)
Paying health care bills	10 469	2116 (20)	696 (36)	1373 (65)

**Fatigue** 65%  
**Cognition** 75%  
**Sexuality** 64%  
**Depression** 67%  
**Anxiety** 68%  
**Family** 78%  
**Work Return** 69%  
**Insurance** 73%  
**Payments** 65%



Original Investigation | Health Policy  
**Evaluation of Factors Associated With Unmet Needs in Adult Cancer Survivors in Canada**

(Shakeel et al., 2020)



# Hispanic Cancer Survivorship

# Hispanics/ Latinos

- 60M or 18.5% of the US population
- 100M by 2050  
30% of US pop

- Cancer is the 2<sup>nd</sup> leading cause of death among H/Ls (21% of deaths)

- 4 Million H/L Cancer Survivors in the US

- Less likely than non-Hispanic Whites to be dx with the most common cancers (breast, colorectal, lung, prostate)

- Have a higher risk for cancers associated with infectious agents, such as liver, stomach, and cervix.

- Present with more advanced disease and poorer outcomes across several cancers

(ACS, 2022)



# I Psychological Morbidity & HRQOL in Hispanics

- Systematic review and meta-analysis

- 21 articles (18 datasets)

- Hispanic disparities:

Distress (es 0.37)

Depression (es 0.23)

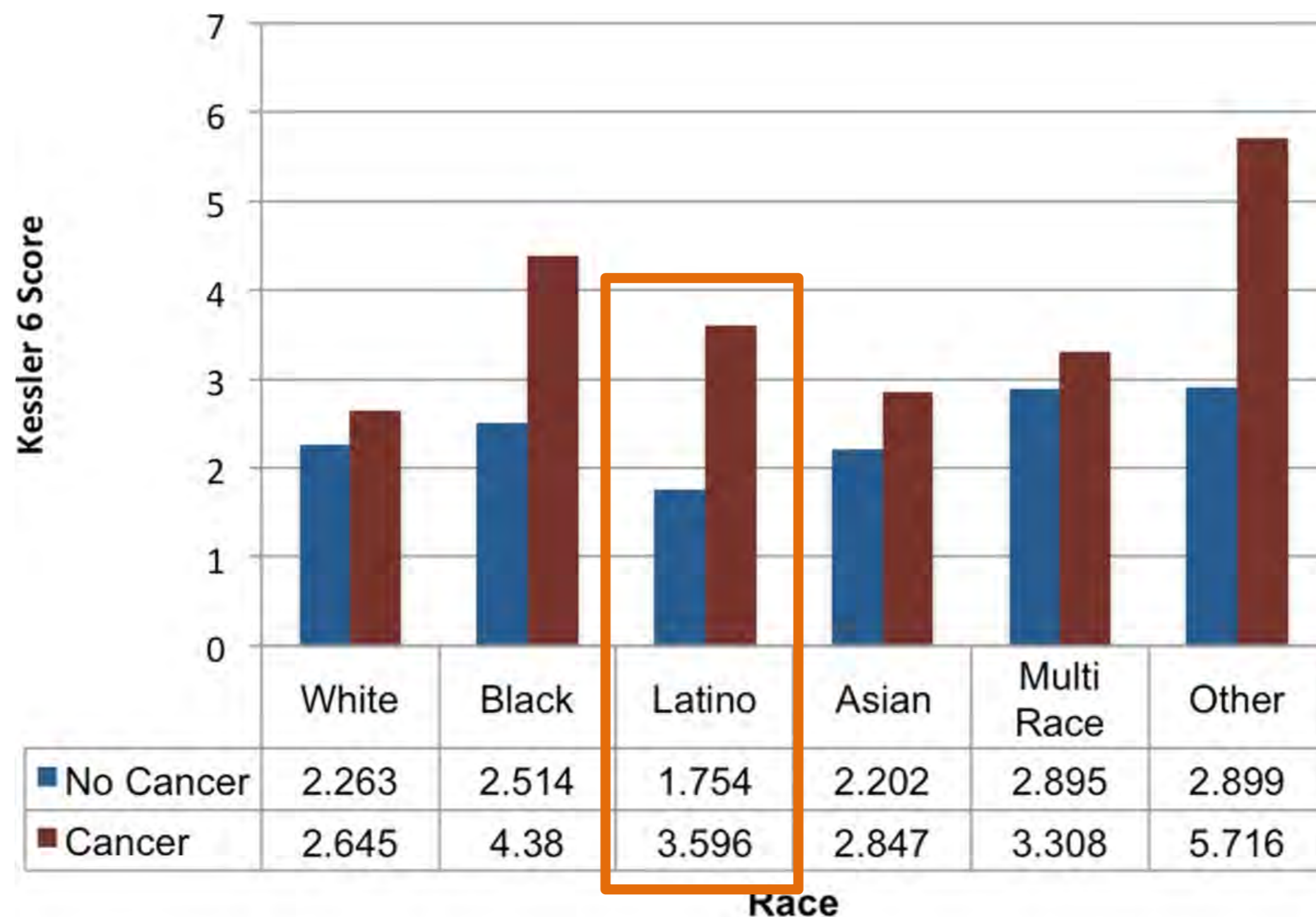
Social QOL (es 0.45)

General HRQOL (es 0.49)

Luckett et al, Lancet Oncology, 2011

# Depression is differentially worse for racial/ethnic minorities cancer survivors

Adult California Health Interview Survey (n=42,879)



Alcala et al, *BMC Pub Hlth*; 2014

# Supportive Care Needs Amon H/L BC, CRC & PC Survivors

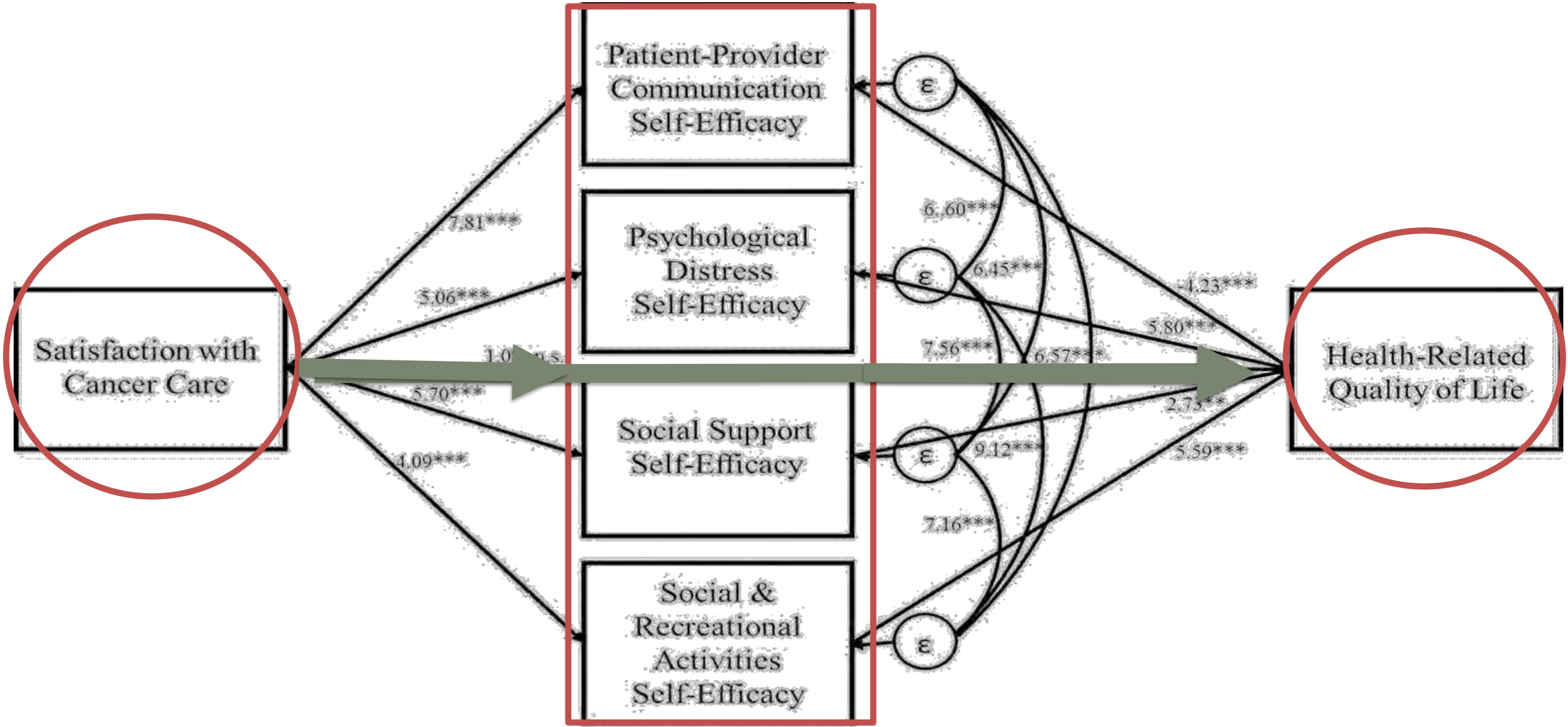
- Two most common unmet needs were in the psychological domain:
  - Fear of recurrence/spread* (32.6%)
  - Concern for close others* (31.3%)
- Greater unmet supportive needs* compared to previously published norms in non-Hispanic/Latino white samples
- Social roles/strain, familism and fatalistic attitudes* may be contributing factors

Unmet Supportive Care Need Domain	Satisfaction with Cancer Care		Prostate Cancer Symptom Burden		Breast Cancer Symptom Burden	
	B (SE)	(95% CI)	B (SE)	(95% CI)	B (SE)	(95% CI)
Psychological (PSY) <sup>a</sup>	-1.66 (1.23)	(-4.08 – .75)	<b>-6.01 (2.02)**</b>	<b>(-10.03 – -1.98)</b>	<b>-8.30 (1.33)***</b>	<b>(-10.95 – -5.66)</b>
Health System & Information (HSI) <sup>b</sup>	<b>-3.81 (1.18)**</b>	<b>(-6.14 – -1.48)</b>	<b>-6.75 (2.12)**</b>	<b>(-10.96 – -2.54)</b>	<b>-6.36 (1.39)***</b>	<b>(-9.12 – -3.60)</b>
Patient Care & Support (PCS) <sup>c</sup>	<b>-3.57 (1.47)*</b>	<b>(-6.46 – -.68)</b>	-5.80 (3.54)	(-12.84 – 1.24)	<b>-4.20 (1.45)**</b>	<b>(-7.07 – -1.32)</b>
Physical & Daily Living (PDL) <sup>d</sup>	<b>-3.65 (1.46)*</b>	<b>(-6.53 – -.77)</b>	-5.80 (3.54)	(-12.84 – 1.24)	<b>-4.18 (1.44)**</b>	<b>(-1.33 – -7.04)</b>
Sexuality (SXN) <sup>e</sup>	<b>-2.05 (1.24)†</b>	<b>(-4.49 – .39)</b>	<b>-8.13 (1.67)***</b>	<b>(-11.44 – -4.81)</b>	<b>-6.24 (1.54)***</b>	<b>(-9.29 – -3.20)</b>

(Moreno et al., 2019)

# Self-Efficacy/Controllability Mediates Care Satisfaction → HRQOL in H/Ls

- 300 H/L BC, CRC, PC
- Satisfaction associated with self-efficacy & greater HRQoL
- Self-efficacy/confidence in managing:
  - psychological distress
  - support from close others
  - social/activities
  - patient-provider communication



Adjusting for acculturation, language, nativity, and other covariates of HRQoL did not alter findings (Moreno et al., 2019)

# Factors that May Impact Psychosocial Adjustment and Health Outcomes in Hispanics/Latinos

- Structural disadvantage well documented ✓
- Practical needs (e.g., transp., child-care) ✓
- Physical and Emotional Symptom Burden ✓
- Sociocultural Factors—Limited Work ~
  - Homogeneous samples
  - Low SES and/or acculturation
  - Provider education

H/Ls Lowest Coverage  
Late DX & Poor Adherence

3 or >; Obesity,  
Diabetes & Liver DZ

Greater Burden  
Poorer HRQoL & Adherence

Acculturation & Education

Lower Self-Efficacy  
Lower Optimism

Family Roles, Cohesion,  
Role Strain

Structural & Psychosocial Barriers?

Resilience: Extended Family & Cohesion, Spirituality, etc.

  
 **My** Wellness Check

**Risk Stratified Care:  
EHR-Integrated PRO Assessment  
& Triage**

# Potential Benefits of Capturing PROs in Ambulatory Oncology

- Assessment of a patient's symptoms, function and quality of life are **essential to quality medical care.**
- **Clinician ratings of symptom severity are often lower** than that reported by patients, especially for subjective symptoms (e.g., anxiety, fatigue).
- Promotes **risk-stratified care.**

## Growing Literature Supports that PROs can promote:

- Individualized patient care
- Enhanced patient-physician communication
- Shared health decision-making
- Patient engagement

(e.g., Di. Maio, M. *et al.* 2016; Penedo *et al.*, 2017, 2020)

# My Wellness Check



(Penedo et al., 2022)



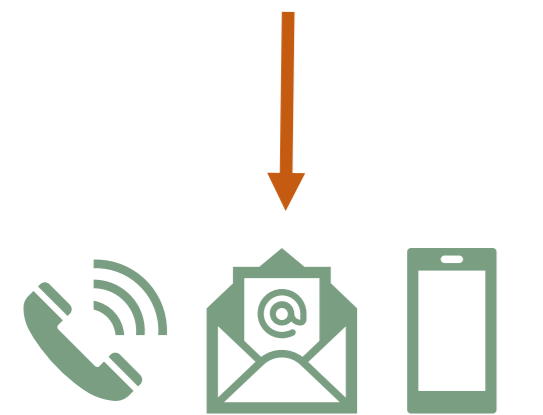


# My Wellness Check



**Patient Eligibility**  
(e.g., ICD-10, 2<sup>nd</sup> visit or later, no > once within 30 days, medical appointment)

**Real-time Scoring & EMR Coding**  
(Real-Time Data, EHR, PRO CATs, Needs, HRQoL, Alerts, Reports)




  
**At Home**  
(Patient Portal)

**Reminders**  
(text, email, or call; 72 hours prior to visit)



**My Wellness Check Complete**  
(12-20 minutes)

**Alert**      **No Alert**

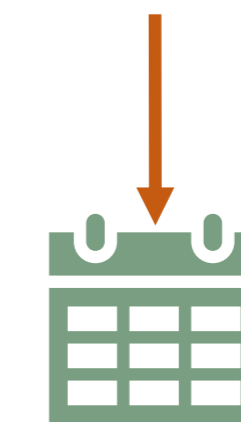


  
**At Clinic**  
(Intake Nurse)

**Patient Report Outcomes**  
Anxiety, Depression, Fatigue, Pain, Physical Function  
**Nutrition Needs**  
**Practical Needs** (eg, transp.)  
**Rehabilitation Needs**  
**Quality of Life** (FACT-G7)

**Symptom Management & Provider Disposition Coded**  
(e.g., Health interventions, telephone counselling, referrals, and medication management)

**Social Work** (PHQ-9, GAD 7)  
**Nutrition**  
**Rehab Med**  
**Medical Team**



**Reassess**  
(within 30 days, appointment)

# PROMIS® Items & Alert Thresholds

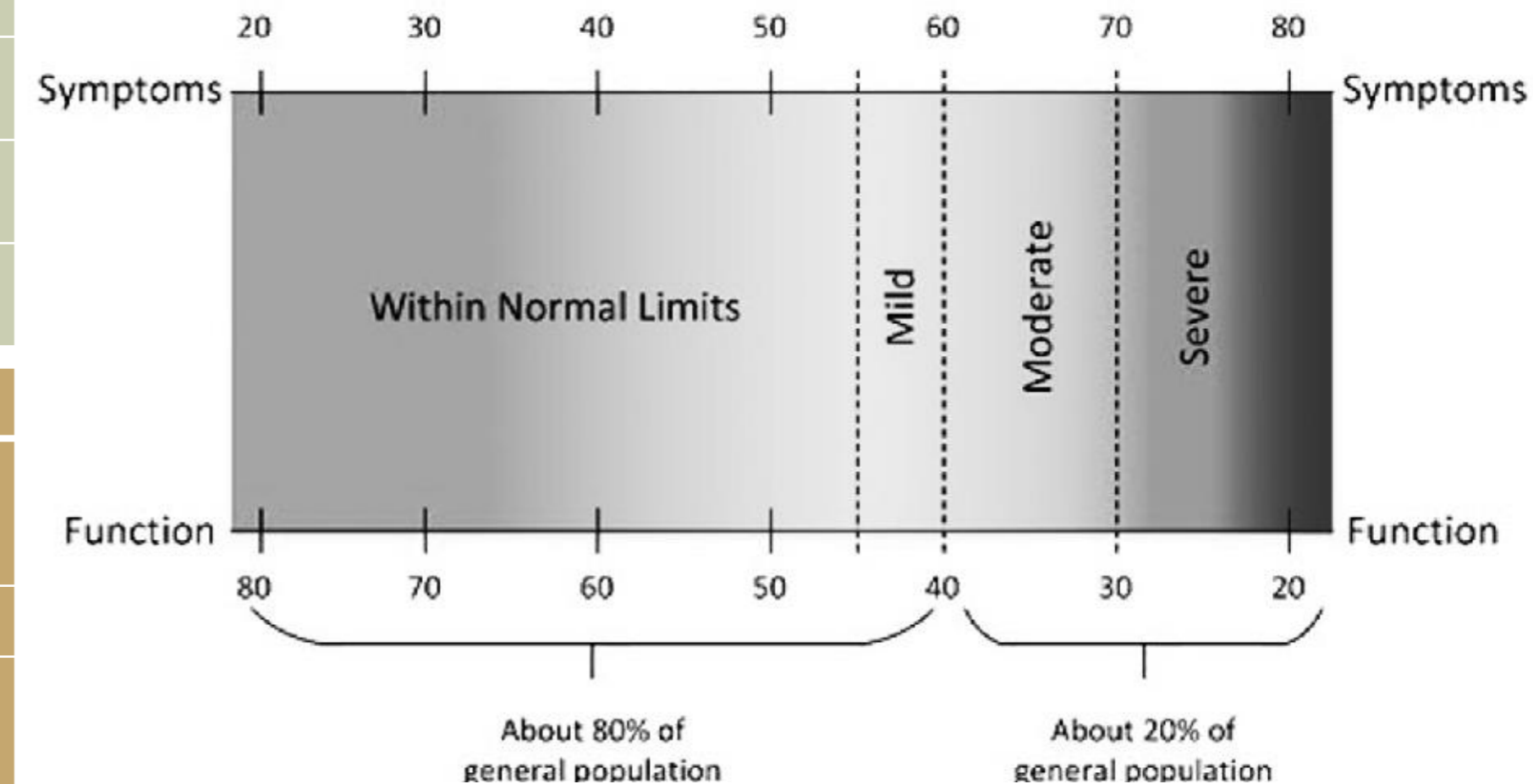
## PROMIS CATs ITEM BANKS USED

PROMIS Bank v1.0 (English + Spanish)	Fatigue
PROMIS Bank v1.1 (English + Spanish)	Pain Interference
PROMIS Bank v1.2 (Spanish), v2.0 (English)	Physical Function
PROMIS Bank v1.0 (English + Spanish)	Anxiety
PROMIS Bank v1.0 (English + Spanish)	Depression

## PROMIS Scoring Thresholds

PROMIS CAT	SEVERITY CATEGORIES				CLINICIAN ALERT
	Normal	Mild	Moderate	Severe	
Fatigue	< 50	50 - 59	60 - 69	≥ 70	≥ 70
Pain Interference	< 50	50 - 59	60 - 69	≥ 70	≥ 70
Physical Function	> 55	55 - 46	45 - 31	≤ 30	≤ 30
Anxiety	< 55	55 - 64	65 - 74	≥ 75	≥ 65
Depression	< 55	55 - 64	65 - 74	≥ 75	≥ 60

## Interpreting PROMIS® T-Scores\*



# Practical & Psychosocial Needs

https://uhemmychlb1t.med.miami.edu/MyChartPOC/inside.asp?mode=questionnaire&src=eche

MyHealthChart.com Mychart Health Visits Messaging Billing

eCheck-In  
Personal Info Insurance Questionnaires Medications Allergies Health Issues Sign Documents

### Practical & Psychosocial Needs

For an upcoming appointment with Joseph Pearson, MD on 4/5/2019

Indicates a required field.

I would like for a treatment team member to contact me for help with (check all that apply):  
Select all that apply.

- No needs at this time
- Transportation resources
- Support to help me cope with my illness and/or manage stress
- Advance directives: medical actions to be taken if my health prevents me from making decisions (living will, power of attorney)
- Financial/Insurance concerns about my health care
- Oncofertility (ability to have children)
- Child Care
- Housing needs/concerns
- Work/school concerns
- Family Problems/Family Health concerns
- Spiritual/Religious concerns
- Sexual Health concerns
- General education about my illness and assistance with treatment decisions

CONTINUE FINISH LATER CANCEL

# Patient Portal Interface

## PROMIS – Anxiety CAT

https://uhemmychlb1t.med.miami.edu/MyChartPOC/inside.asp?mode=questionnaire&src=eche

MyHealthChart.com Bob Health Visits Messaging Billing Resources

eCheck-In  
Personal Info Insurance Questionnaires Medications Allergies Health Issues

### Emotional Well-being A

For an upcoming appointment with Joseph Pearson, MD on 4/5/2019

In the past 7 days

I found it hard to focus on anything other than my anxiety

Never  
Rarely  
Sometimes  
Often  
Always

CONTINUE CANCEL

# Sample EPIC Functionality...

counter Complete BPA Chart Telephone Call Letter

Visits/Patient Info Meds/Problems Vitals/Labs My Last Note Help Manage QuickActions

**PROMIS Social Work Anxiety alert** Received: 2 days ago

Mychart, Generic → P Myc Promis Social Workers; P

**Best Practice Alerts**

**Patient has elevated scores of Anxiety.** Active

Date	User	Actions Taken	Triggers	Comment
10/28/19 0946	Mychart, Generic [MYCHARTG]	Send In Basket Message	Patient-Entered Data	None

[More Detail >>](#)

Current view: Showing all answers [Show Only Relevant Answers](#)

**Legend:**

Triggered a BPA Scoring question

**Patient Responses**

**Um Promis Cat V1.0 Anxiety**

10/28/2019 9:46 AM EDT - Entered by Um Generic Physician, MD on 10/28/2019

Question	Response
I felt uneasy	Often
I found it hard to focus on anything other than my anxiety	Always
I felt fearful	Often
My worries overwhelmed me	Always
<b>PROMIS Anxiety T-Score (range: 10 - 90)</b>	<b>75 (severe) !</b>

**Item Level Responses**

**BestPractice** 0 unread, 2 total Sort & Filter

Status	Msg Date	Msg Time	Subject
Read	10/28/2019	9:46 AM	PROMIS Social Work Depression alert Patient: Test, Ada Potato Visit: 10/28/2019 Pool?: X
Read	10/28/2019	9:46 AM	PROMIS Social Work Anxiety alert Patient: Test, Ada Potato Visit: 10/28/2019 Pool?: X

**Recorded Disposition**

**Complete BestPractice Advisory - Test, Ada Potato**

**! Patient has elevated scores of Anxiety.**

Acknowledge Reason

- Elevated Distress Discussed With Patient...
- Elevated Distress Discussed With Patient...
- Unable To Contact Patient, Disposition P...
- Elevated Distress Discussed With Patient...
- Provided Other General Education, no ref...

Accepting this form will complete this advisory and retract related In Basket messages.

**PROMIS Depression T-Score**

Last answered: June 29, 2023

**65 moderate**

This value is trending in a worse direction.

**Most Recent** Month Year 5 Years

**Most Recent Results**

Date	T-Score
Apr 14 2023	~58
Jun 29 2023	65

**Provider & Patient Facing Trends**

# Patient Demographics

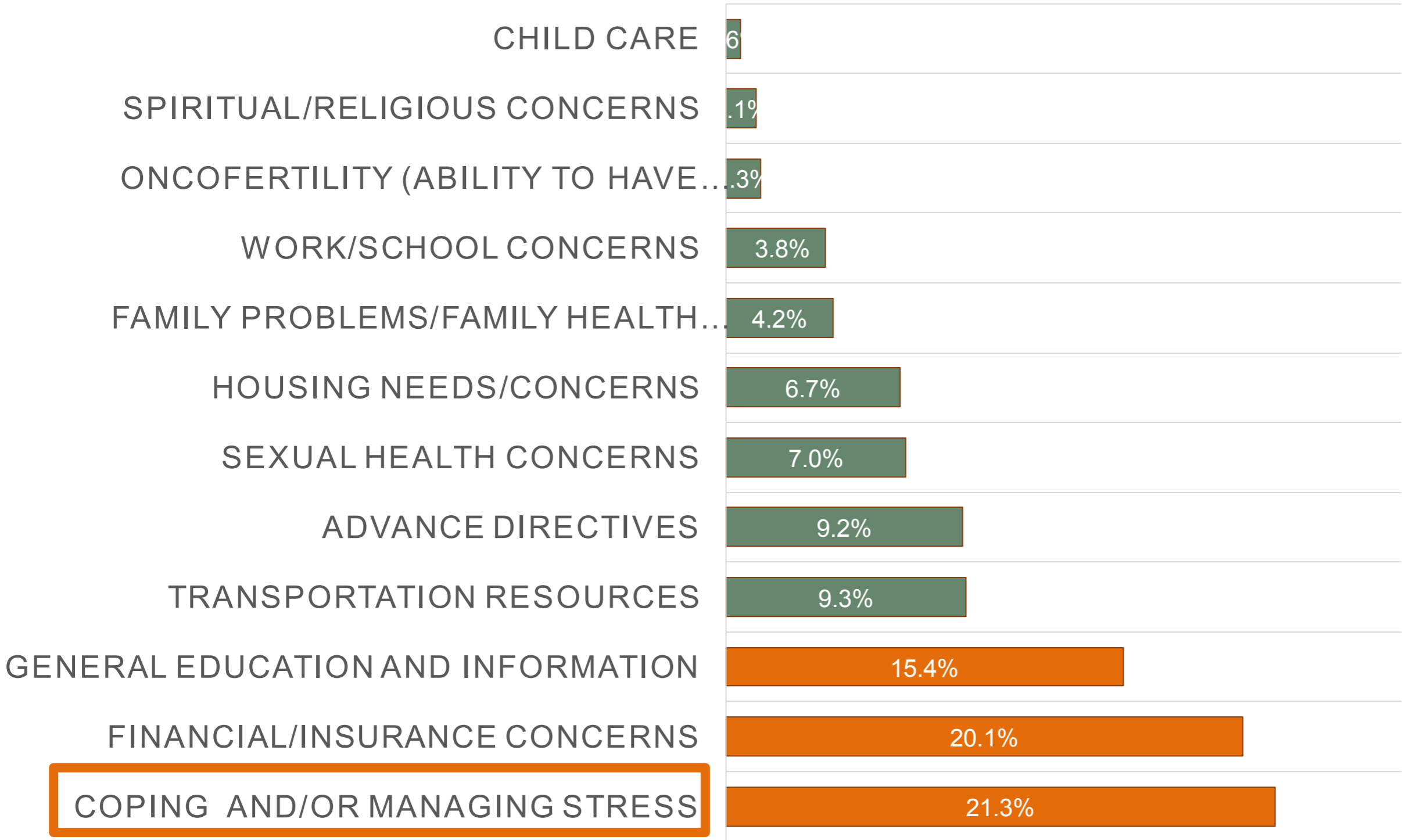
## 10,637 assessments completed by 6,079 unique patients

Patient Demographics	Mean (SD)
Age	62.6 (13.1)
Charlson Score	6.2 (3.7)
Sex	N (%)
Male	2287 (43.7)
Female	2949 (56.3)
RACE	
White	4618 (88.2)
Black	380 (7.3)
Asian	85 (1.6)
Other	19 (0.4)
Refused or Not Reported	134 (2.5)
Ethnicity	
Hispanic/Latino	2506 (47.9)
Non-Hispanic or Latino	2541 (48.5)
Refused or Not Reported	189 (3.6)

Cancer Diagnosis	
Breast	969 (18.5)
Hematology	788 (15.1)
GI	653 (12.5)
Male Genital	571 (10.9)
Head and Neck	415 (7.9)
Lung	412 (7.9)
GYN	426 (8.1)
Skin	236 (4.5)
Uro	203 (3.9)
Sarcoma	129 (2.5)
Brain	63 (1.2)
Other	245 (4.7)
Unknown	113 (2.0)
Cancer Stage	
Stage 0	42 (0.8)
Stage I	425 (8.1)
Stage II	317 (6.1)
Stage III	276 (5.3)
Stage IV	275 (5.3)
Unknown	3901 (74.5)

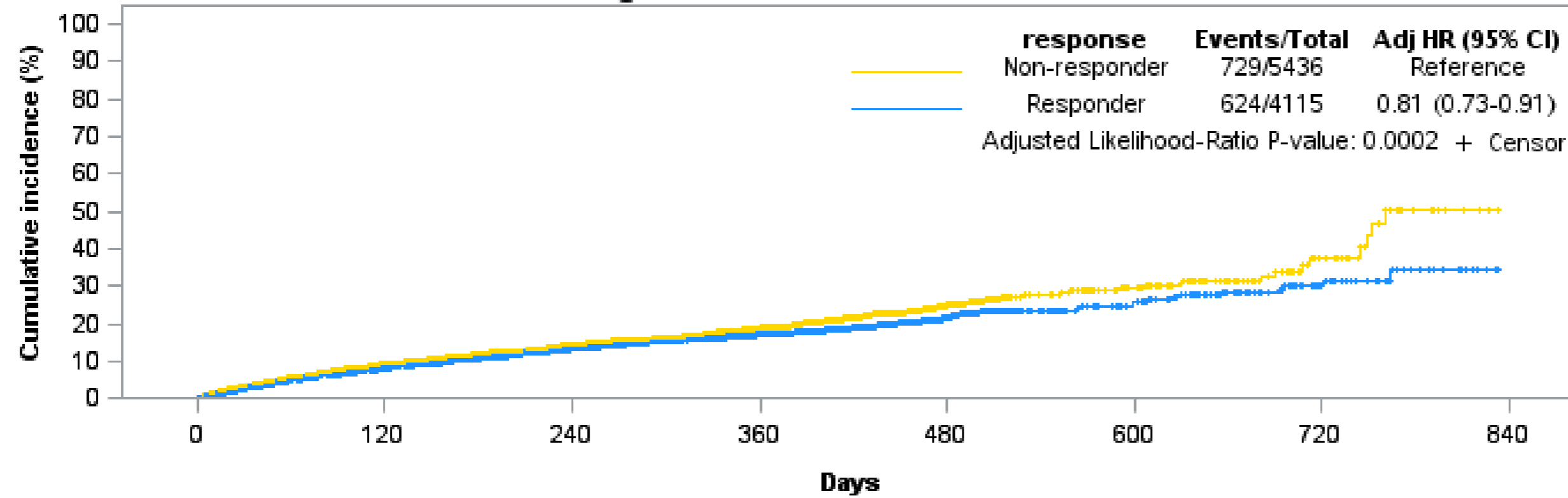
# Psychosocial & Practical Needs

# Emotional & Physical SxS



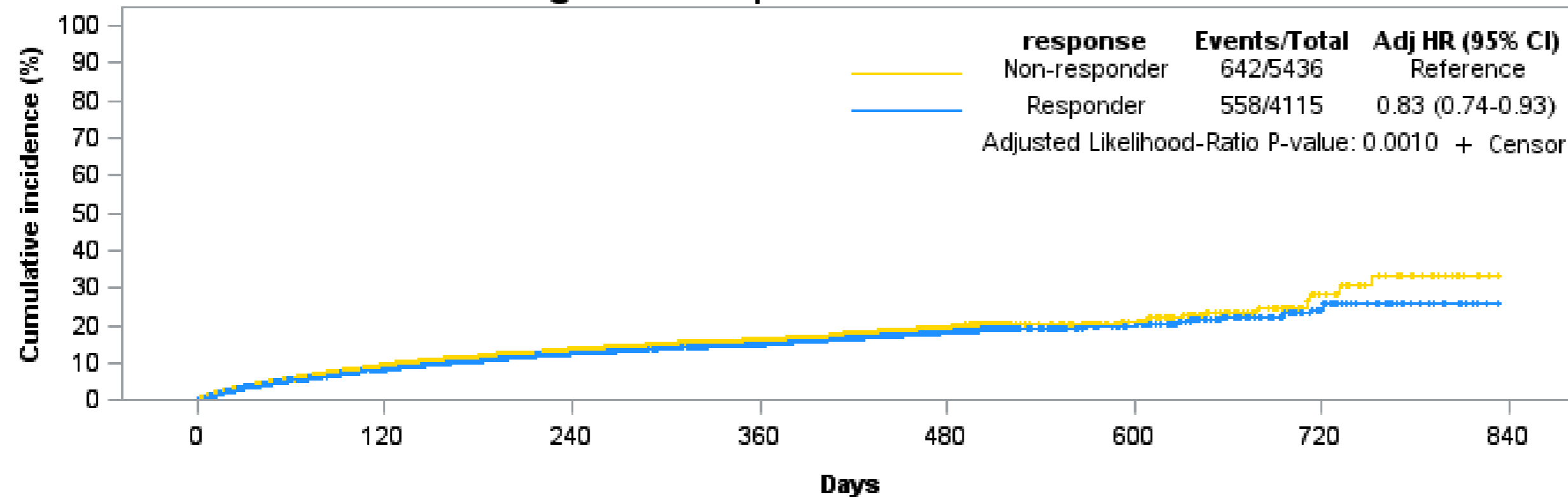
PROMIS® CATs (Severe)	
Depression	8%
Anxiety	9%
Pain	7%
Fatigue	6%
Physical Function	12%

Figure2a ER visit



	No. at risk	120	240	360	480	600	720	840
Non-responder	5436	3386	2122	1230	320	118	29	0
Responder	4115	3143	2313	1563	481	152	50	0

Figure2b Hospitalization



	No. at risk	120	240	360	480	600	720	840
Non-responder	5436	3393	2163	1291	347	137	35	0
Responder	4115	3142	2343	1616	510	162	57	0

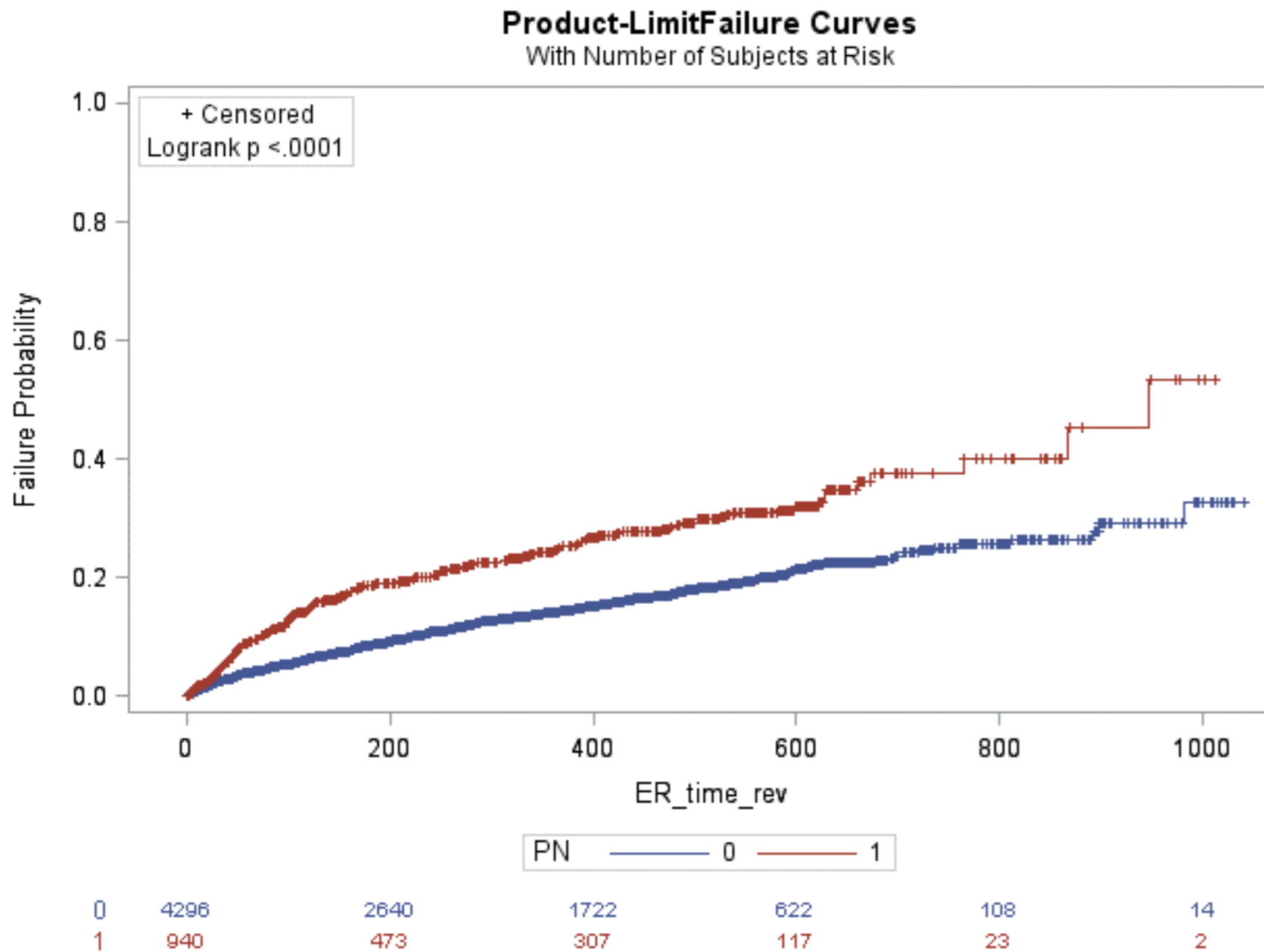
**Non-Responders:  
Greater likelihood  
of ER Visits  
& Hospitalization**

**Non-Engagement:**

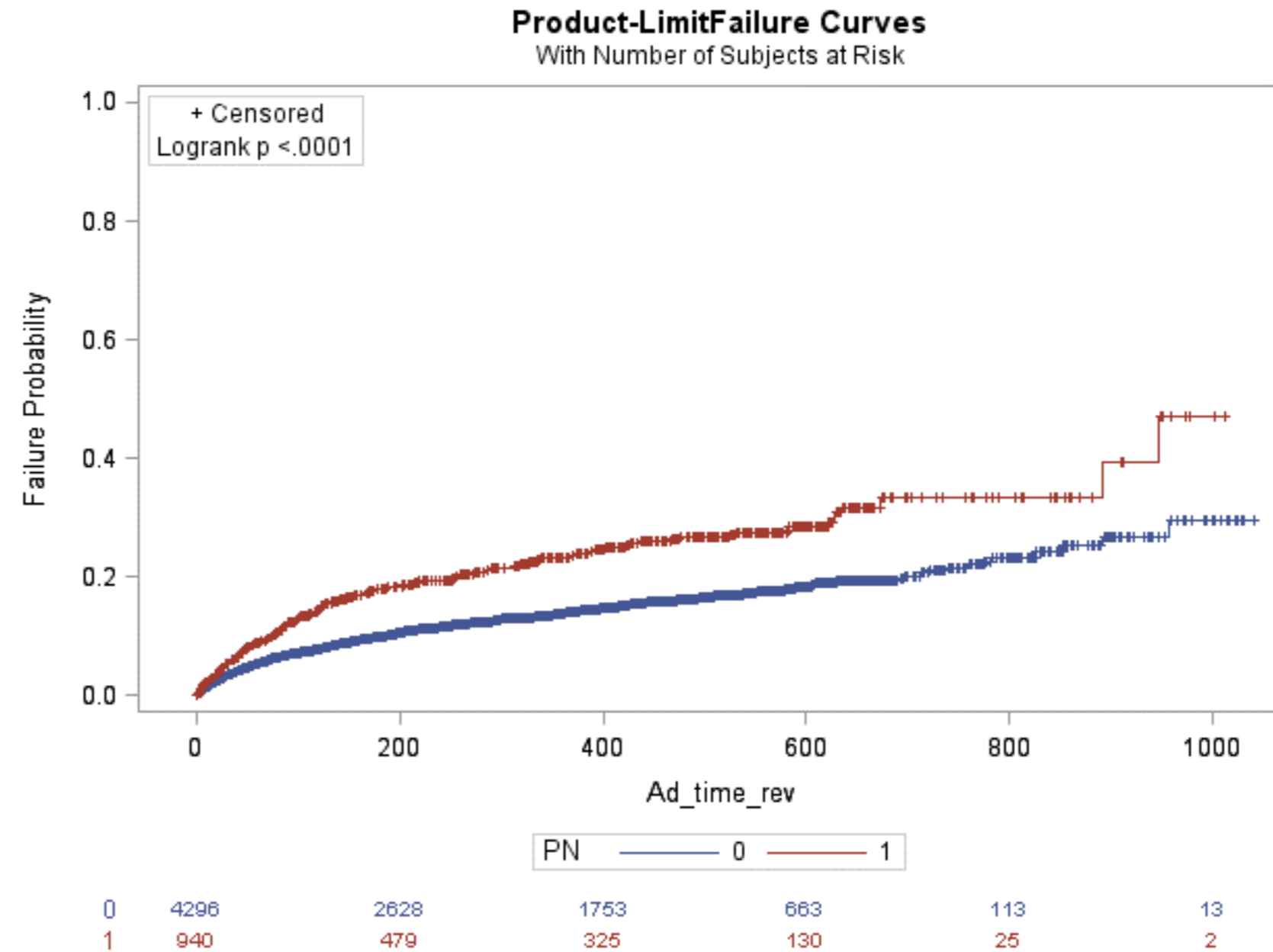
- Older age
- Single
- Male
- **Hispanic Ethnicity**

Journal of Clinical Oncology®  
An American Society of Clinical Oncology Journal  
(2022)

# Unmet practical need associated with greater likelihood of ER visits and Hospitalizations



**Figure 1:** Cumulative incidence of ER visits



**Figure 2:** Cumulative incidence of hospitalizations



# Unmet practical needs is an independent risk factor for ER visit/hospitalization after controlling demographics and PROs

ER	Univariate		Multivariate	
	HR (95%CI)	P value	HR (95%CI)	P value
Age	0.99 (0.98-0.99)	0.004	0.99 (0.98-0.99)	0.003
Gender				
Male (vs. Female)	0.97 (0.94-1.12)	0.66		
Race				
White (ref)	-	-	-	-
Black	1.43 (1.13-1.82)	0.003	1.66 (1.27-2.16)	0.0002
Other	0.99 (0.67-1.48)	0.98	1.29 (0.85-1.94)	0.22
Unknown	0.41 (0.15-1.08)	0.07	0.44 (0.14-1.40)	0.16
Ethnicity				
Non-Hispanic (ref)	-	-	-	-
Hispanic	0.45 (1.25-1.68)	<0.0001	1.46 (1.23-1.74)	<0.0001
Unknown	0.67 (0.39-1.15)	0.15	0.78 (0.44-1.38)	0.40
Charlson Score	1.17 (1.15-1.20)	<0.0001	0.17 (1.14-1.19)	<0.0001
PROs				
Anxiety	2.19 (1.80-2.66)	<0.0001	1.45 (1.11-1.89)	<b>0.007</b>
Depression	1.98 (1.63-2.41)	<0.0001	0.95 (0.72-1.26)	0.71
Pain	2.78 (2.15-3.60)	<0.0001	1.52 (1.08-2.14)	<b>0.02</b>
Fatigue	2.09 (1.50-2.91)	<0.0001	0.86 (0.58-1.28)	0.46
Physical function	2.55 (2.11-3.09)	<0.0001	1.67 (1.30-2.14)	<b>&lt;0.0001</b>
Practical Needs	1.85 (1.58-2.17)	<0.0001	1.48 (1.23-1.77)	<b>&lt;0.0001</b>

Hospitalization	Univariate		Multivariate	
	HR (95%CI)	P value	HR (95%CI)	P value
Age	0.99 (0.98-0.99)	<0.0001	0.98 (0.97-0.99)	<0.0001
Gender				
Male (vs. Female)	1.20 (1.04-1.39)	0.01	1.35 (1.15-1.60)	0.0003
Race				
White (ref)	-	-	-	-
Black	1.35 (1.06-1.72)	0.01	1.62 (1.24-2.11)	0.0004
Other	0.98 (0.66-1.46)	0.92	1.49 (1.01-2.20)	0.045
Unknown	0.40 (0.15-1.07)	0.07	0.70 (0.28-1.73)	0.44
Ethnicity				
Non-Hispanic (ref)	-	-	-	-
Hispanic	1.17 (1.01-1.36)	0.03	1.25 (1.05-1.49)	0.01
Unknown	1.19 (0.79-1.78)	0.41	1.12 (0.7-1.79)	0.64
Charlson Score	1.20 (1.18-1.22)	<0.0001	1.20 (1.17-1.22)	<0.0001
PROs				
Anxiety	1.67 (1.35-2.07)	<0.0001	0.78 (0.73-1.32)	0.89
Depression	1.80 (1.46-2.01)	<0.0001	0.94 (0.70-1.27)	0.71
Pain	2.35 (1.79-3.08)	<0.0001	1.13 (0.79-1.63)	0.51
Fatigue	2.10 (1.51-2.92)	<0.0001	1.08 (0.73-1.59)	0.72
Physical function	2.50 (2.06-3.03)	<0.0001	1.84 (1.43-2.37)	<b>&lt;0.0001</b>
Practical Needs	1.73 (1.47-2.05)	<0.0001	1.48 (1.23-1.78)	<b>&lt;0.0001</b>

JAMA Network | Open (2023)

# Unmet Needs & HRQoL (FACT-G 7)

	Model 1	Model 2	Model 3
Explanatory variables	Standardized coefficient	Standardized coefficient	Standardized coefficient
<b>Step 1: Demographics</b>			
Age	0.008	0.01	0.002
Female gender (ref: male)	-0.05**	-0.05**	-0.05**
Race			
White (ref)			
Black	-0.003	0.007	0.02
Other	0.01	0.02	0.01
Hispanic (ref: non-Hispanic)	0.03	0.04*	0.04**
Not insured (ref: insured)	-0.03	-0.03	-0.02
No partner (ref: living with a partner)	-0.09***	-0.08***	-0.06***
<b>Step 2: Clinical factors</b>			
Metastatic disease (ref: early stage)		-0.005	-0.008
Year since cancer diagnosis		0.04*	0.03
Charlson Comorbidity Score		-0.20***	-0.19***
No active treatment (ref: receiving treatment)		0.11***	0.10***
<b>Step 3: Cancer Supportive care needs</b>			
Number of cancer supportive care needs			-0.27***
F	4.99***	17.66***	34.95***
R <sup>2</sup>	0.01	0.08	0.15
ΔR <sup>2</sup>	--	0.07	0.07
<b>*p&lt;0.05, **p&lt;0.01, ***p&lt;0.001</b>			

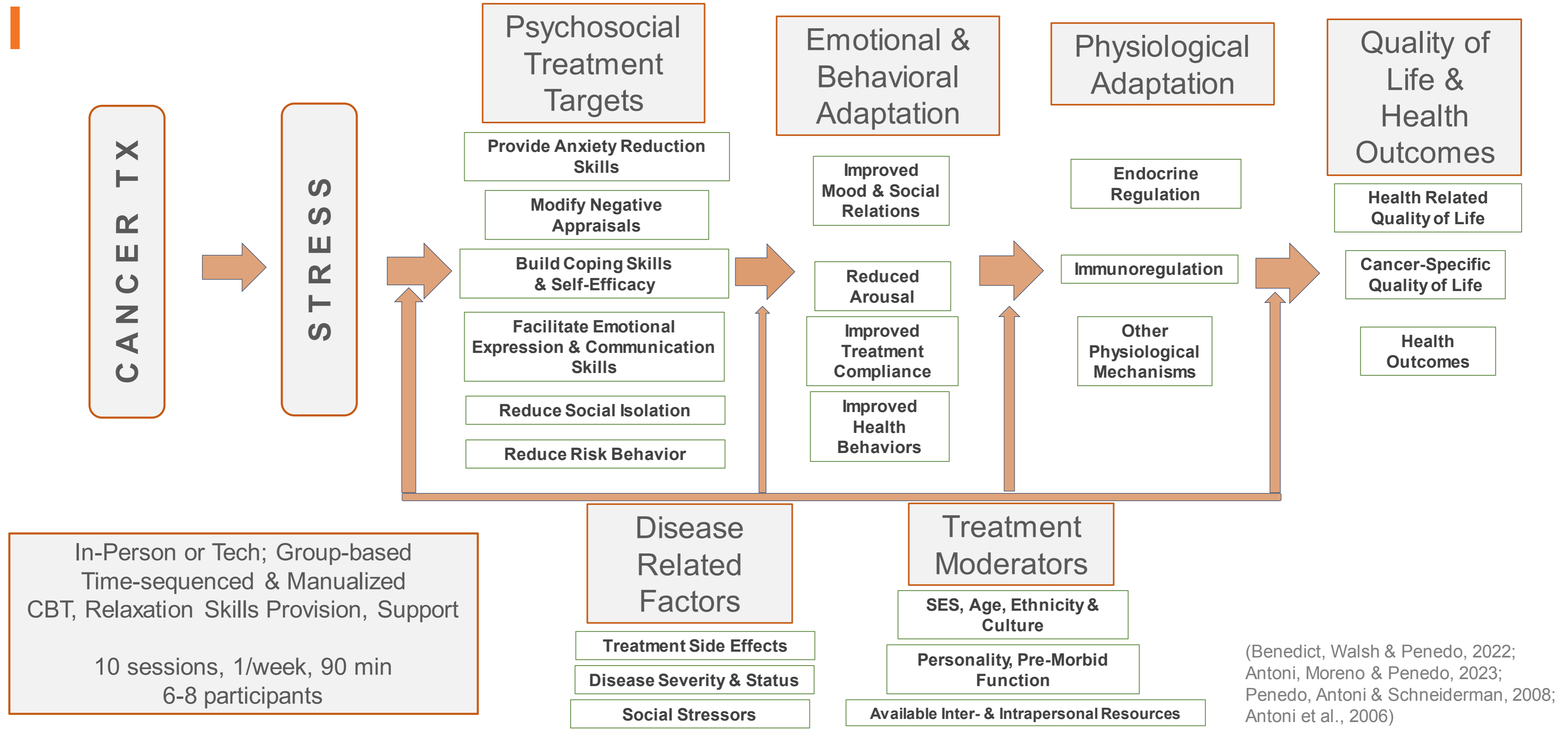
JAMA Network Open (2023)



# Cognitive Behavioral Stress Management

**eHealth-Delivered  
Evidence-Based Psychosocial Interventions  
to Improve PROs in Cancer Survivors**

# COGNITIVE BEHAVIORAL STRESS MANAGEMENT IN CANCER



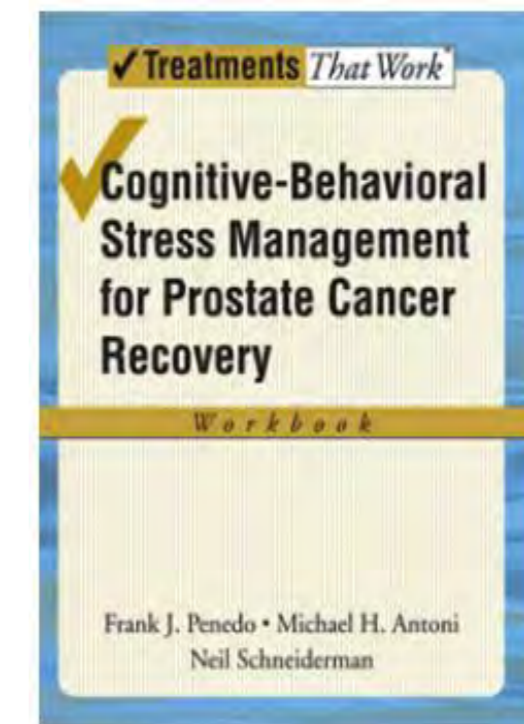
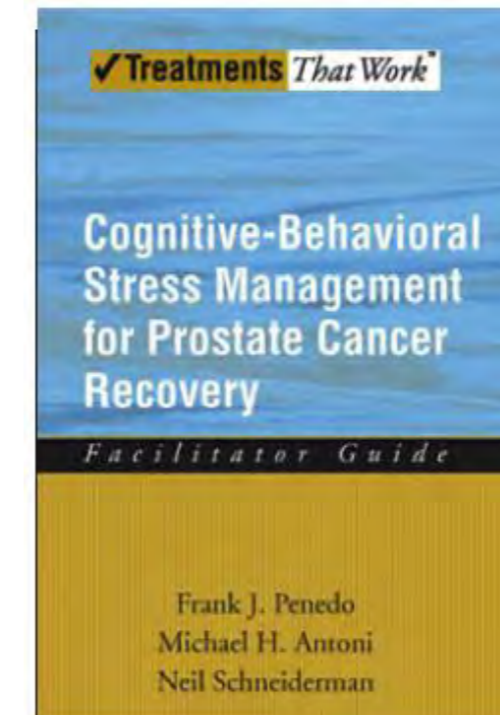
# CBSM, Symptom Burden and Health-Related Quality of Life (HRQoL) in Cancer Survivors

## Key Findings & Dissemination to Community Audiences

- HRQOL
- Stress management skills
- Coping, Mood
- Benefit finding
- Immunoregulation—Inflammation

Clinically significant improvements in:

- Sexual function
- Emotional well-being (for anxious, socially inhibited & stressed) Improved Immunoregulation
- In person
- Via e/mHealth platforms
- English/Spanish

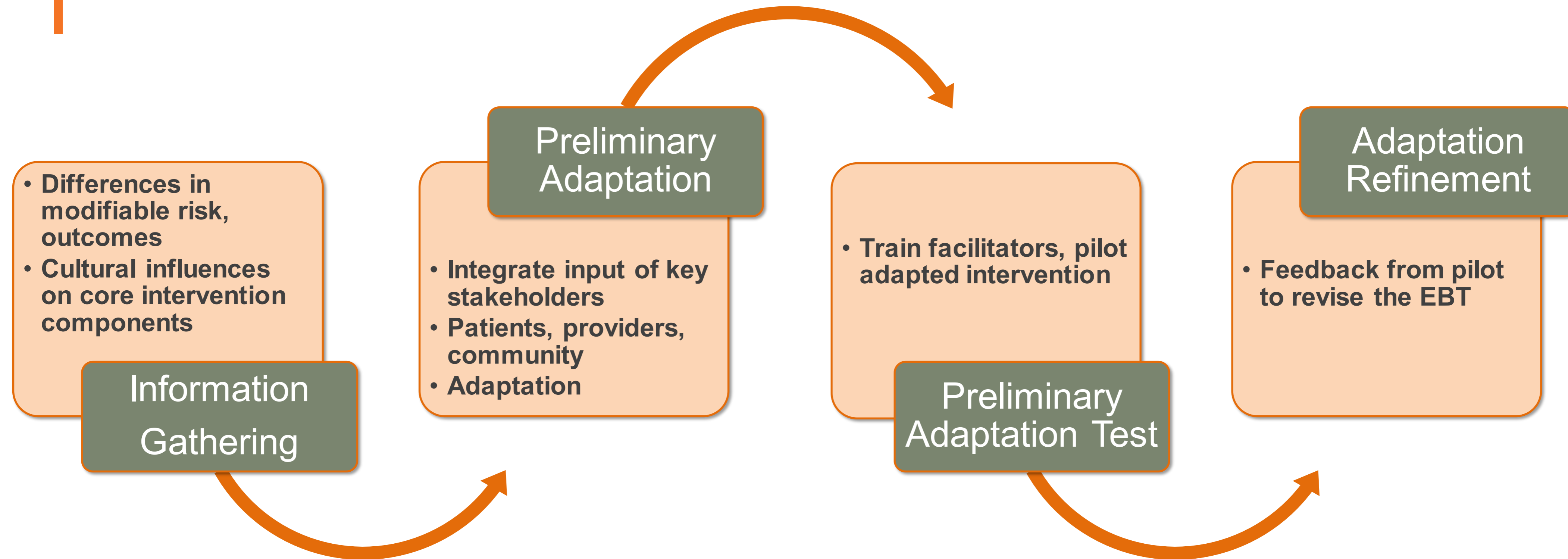




# Culturally Adapted Cognitive Behavioral Stress Management

## Adapting Evidence-Based Psychosocial Interventions for Hispanic Cancer Survivors

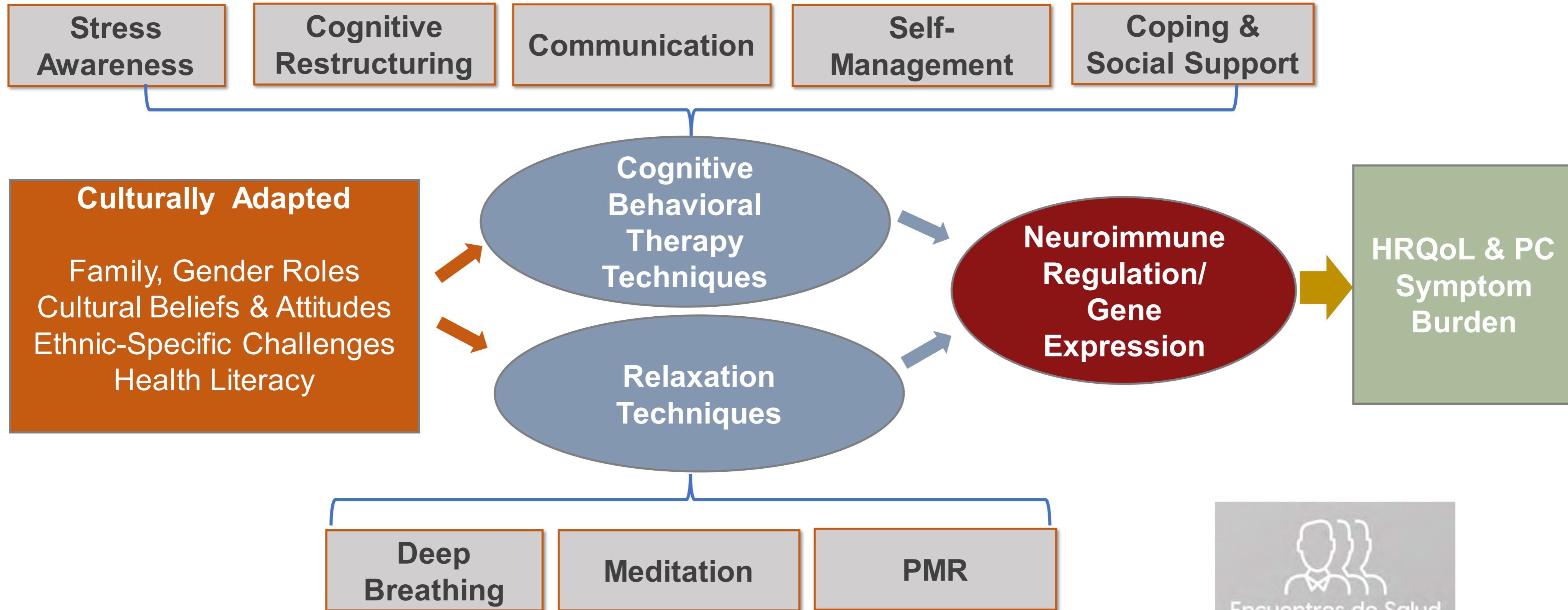
# Four Stages of Cultural Adaptation



- Bernal G, Domenech Rodriguez MM. Advances in Latino family research: cultural adaptations of evidence-based interventions. *Fam Process*. 2009; 48(2):169-178.
- Hwang WC. The psychotherapy adaptation and modification framework: application to Asian Americans. *Am Psychol*. 2006; 61(7):702-715.
- Barrera M Jr, Castro FG, Strycker LA, Toobert DJ. Cultural adaptations of behavioral health interventions: a progress report. *J Consult Clin Psychol*. 2013; 81(2):196-205.

# Standard CBSM vs. Culturally Adapted CBSM (C-CBSM) in Hispanic PC Survivors

n=260; Spanish Monolingual/Less Acculturated; in person





# Hispanic Sociocultural Influences on Core Intervention Components: Implications for CBT Approaches & CBSM Cultural Adaptations

Cultural Factors	Cultural Process	Psychosocial Implication	Culturally Adapted CBT-Based Strategy in C-CBSM Framed by Hispanic Cultural Factor	
<b>Familism</b>	<b>Strong attachment /interdependence with nuclear &amp; extended family</b>	<ul style="list-style-type: none"> <li>▪ <b><i>Therapeutic gains must benefit &amp; extend to family network</i></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>Identifying efficacious sources of support within the extended family</i></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>Importance of self-care to maintain a strong family</i></b></li> </ul>
<b>Simpatía &amp; Power Distance</b>	Non-confrontational interactions & conformity / powerful others as authority figures to respect	<ul style="list-style-type: none"> <li>▪ <i>Authority figures (e.g., health care providers) not questioned</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Assertiveness skills, distinction between assertive vs. confrontational styles</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Demystifying powerful figures/others</i></li> </ul>
<b>Fatalism &amp; External Locus of Control</b>	<b>Destiny is beyond one's control</b>	<ul style="list-style-type: none"> <li>▪ <b><i>Very little one can do to change the future</i></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>Cognitive restructuring of fatalistic attitudes</i></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>How culture can shape fatalistic beliefs</i></b></li> <li>▪ <b><i>More attention to controllability and modifying outcome expectancies</i></b></li> </ul>
<b>Male Gender Roles</b>	Strong masculine pride and identity	<ul style="list-style-type: none"> <li>▪ <i>Sexual dysfunction as a major threat to identity</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Cognitive restructuring to address multiple aspects of a masculine role</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Attention to how benefits to self support masculine role</i></li> </ul>

# Cultural Tailoring for Hispanic

- Poorer physical, social & emotional outcomes
- Limited evidence-based programs

Como Nuestra Cultura Puede Afectar o Ayudar su Ajuste y Recuperamiento

Didactic on cultural patterns

How adages may influence appraisal and coping processes

## Enfoque Cultural: Procesos Socioculturales en Hispanos

Este manual está adaptado culturalmente para que cada una de las siguientes sesiones tenga un enfoque cultural. Nos enfocaremos en seis valores culturales Hispanos y en dichos o refranes relevantes al contexto de cáncer de próstata. No todos los hombres se relacionarán con estos

Reducing cultural stigmas about cancer & emotions

**Enfoque Cultural**

Objetivo del Facilitador respecto a la Competencia Cultural: Normalizar la expresión emocional y reducir el estigma de la enfermedad.

---

Los Hispanos pueden tener más probabilidad de participar en estrategias de ajuste que no son

**Nuestro mundo es:** Una serie de eventos positivos, neutrales y negativos. Como usted interpreta los eventos con una serie de PENSAMIENTOS que pasan por su mente le llamamos su "diálogo interno". Este diálogo influye en cómo nos sentimos.



**Dicho:** "Ojos que no ven, corazón que no siente"

**Guion:** Este dicho implica que si no vemos lo que pasa no podemos ser afectados por el evento. Lo más importante de este dicho es que de una manera u otra habla sobre la relación que existe entre los eventos, nuestra interpretación (el diálogo interior) y como nos sentimos.

**Estado de ánimo:** Sus pensamientos, es decir su diálogo interno, y no los eventos como tal, son los que crean sus sentimientos. Todas las experiencias son procesadas a través de su cerebro y tienen un significado para usted antes de sentir o tener cualquier respuesta emocional.

How culture may influence sexuality

**Ejercicio 3.2: Como la cultura puede afectar relaciones intimas**

¿Cómo cree usted que el (seleccione abajo) \_\_\_\_\_ afecta sus relaciones íntimas?

En qué manera le afecta el o la:

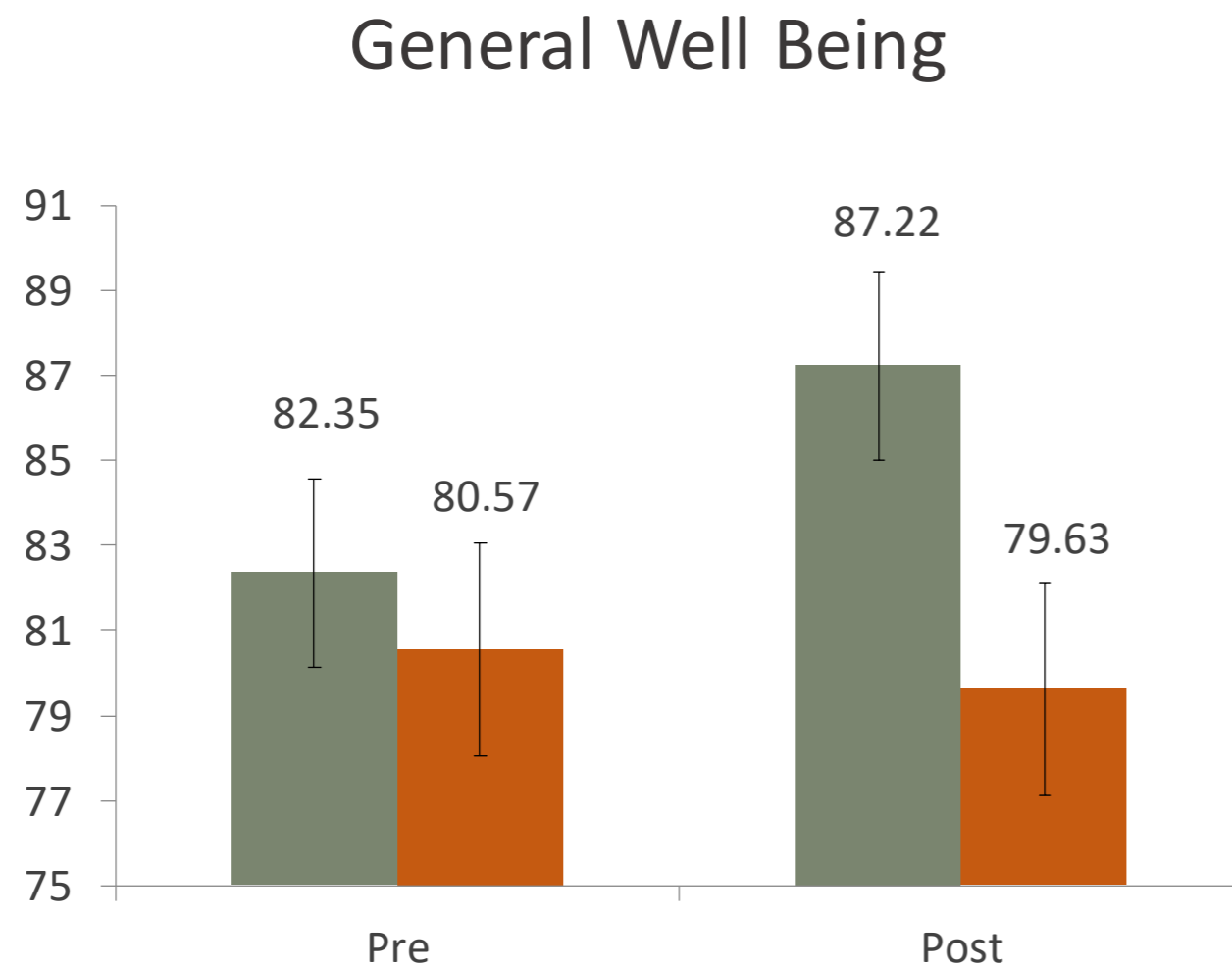
- Machismo: \_\_\_\_\_
- Respeto: \_\_\_\_\_
- Simpatía: \_\_\_\_\_

Peer story as frame of reference

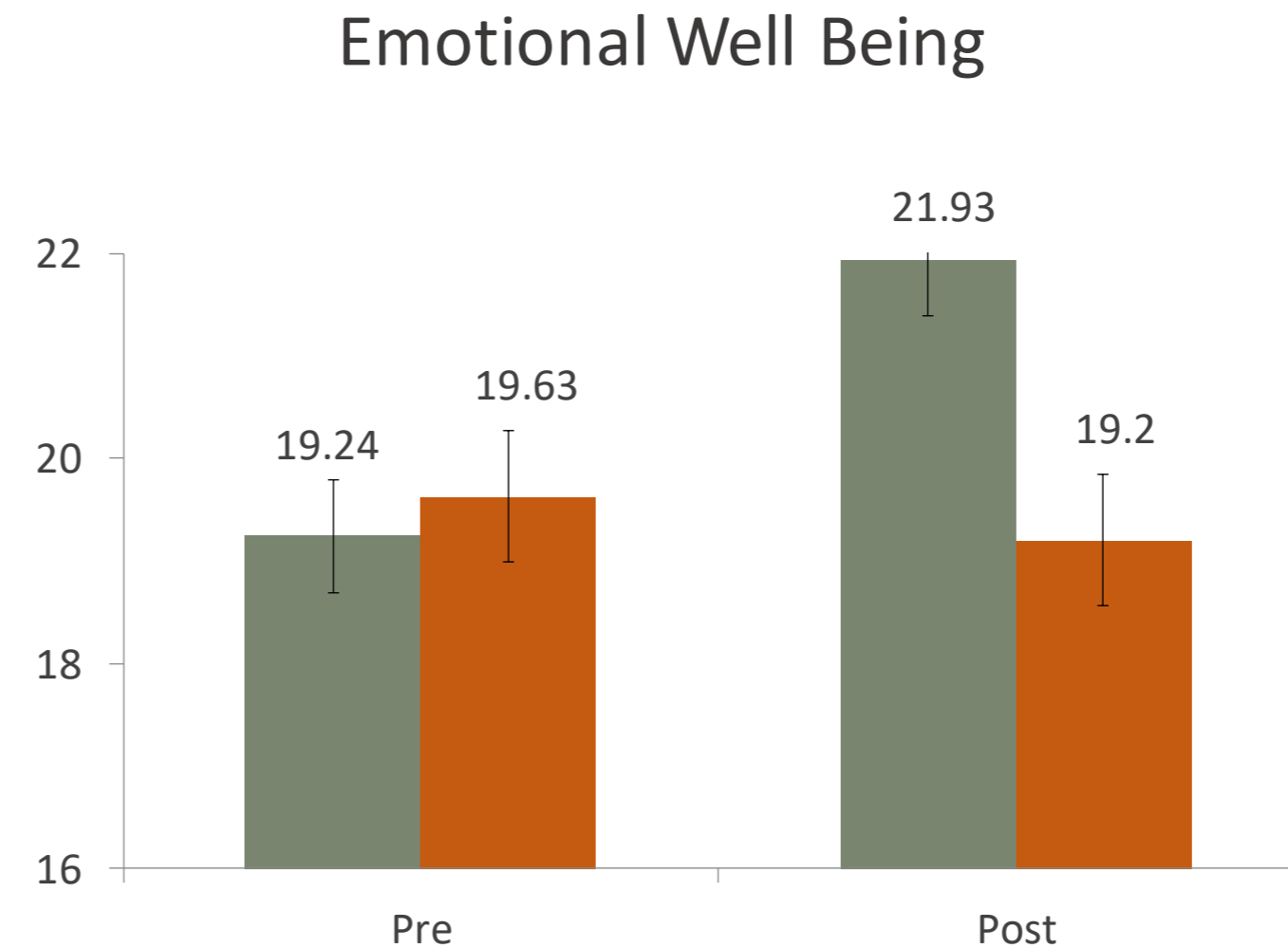
**Actividad en grupo: Vamos a leer la historia de Pedro.**

1. Cree que el diagnóstico de cáncer de próstata es un castigo por algo que hizo mal y entorno algo que se lo merecía.
  - Patrón de pensamiento (distorsión / pensamiento negativo):  
\_\_\_\_\_
  - Patrón cultural (poner en práctica la cultura):  
\_\_\_\_\_

# C-CBSM Intervention Effects in FACT HRQOL (Preliminary)



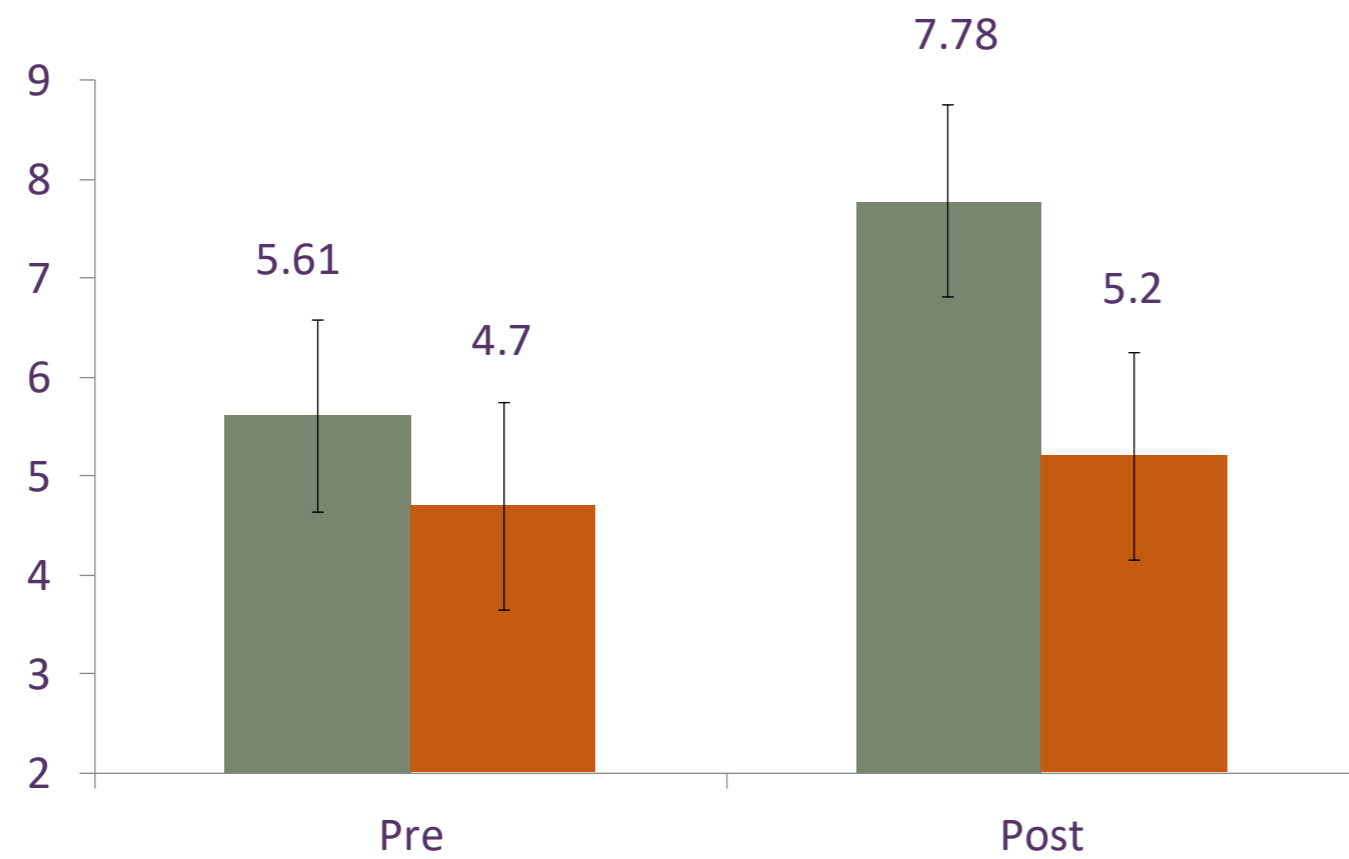
$F(3,66) = 27.7, p < .001.$



$F(3,67) = 7.3, p < .001^a$

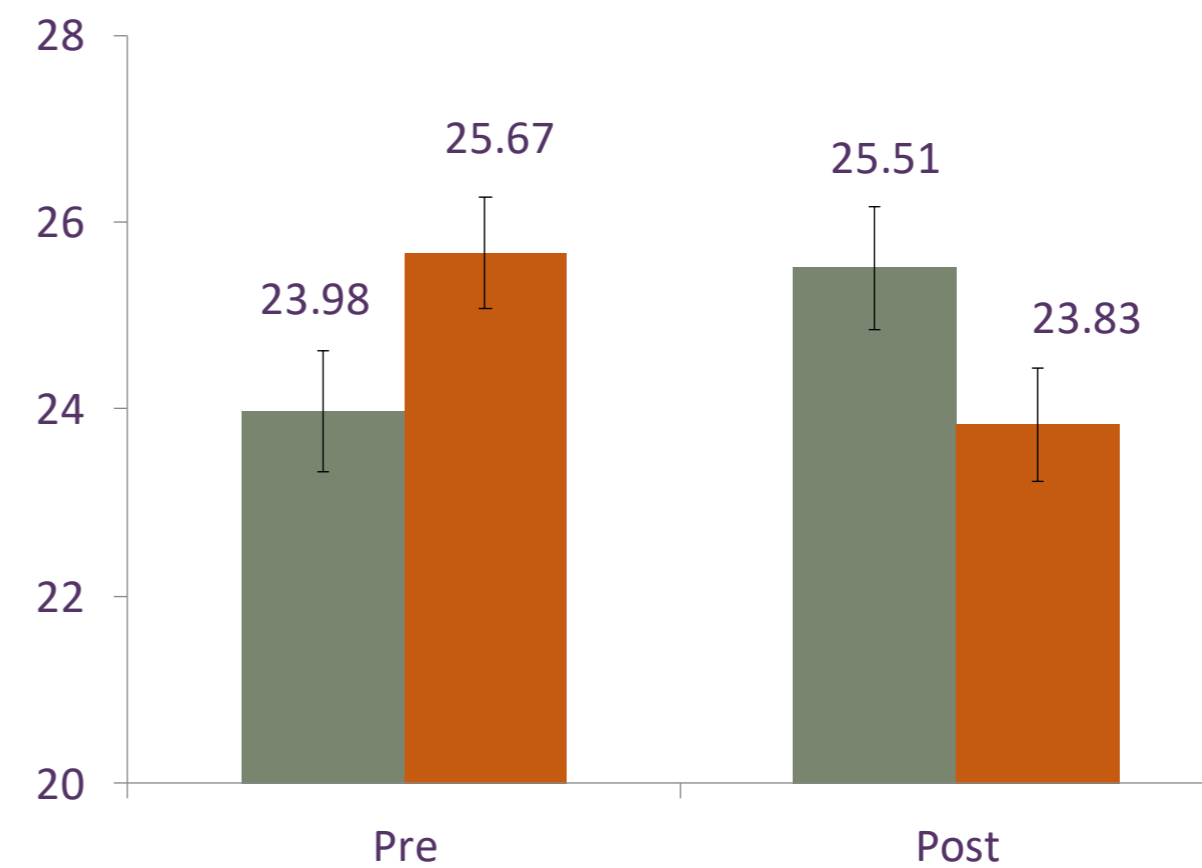
# C-CBSM Intervention Effects in HRQOL (Preliminary)

### EPIC - Sexual Functioning



$F(2,68) = 69.5, p < .001^a$

### FACT - Physical Well Being



$F(4,65) = 8.5, p < .001^a$

# | Ongoing Work & Next Steps



## Hispanic Survivorship Cohort

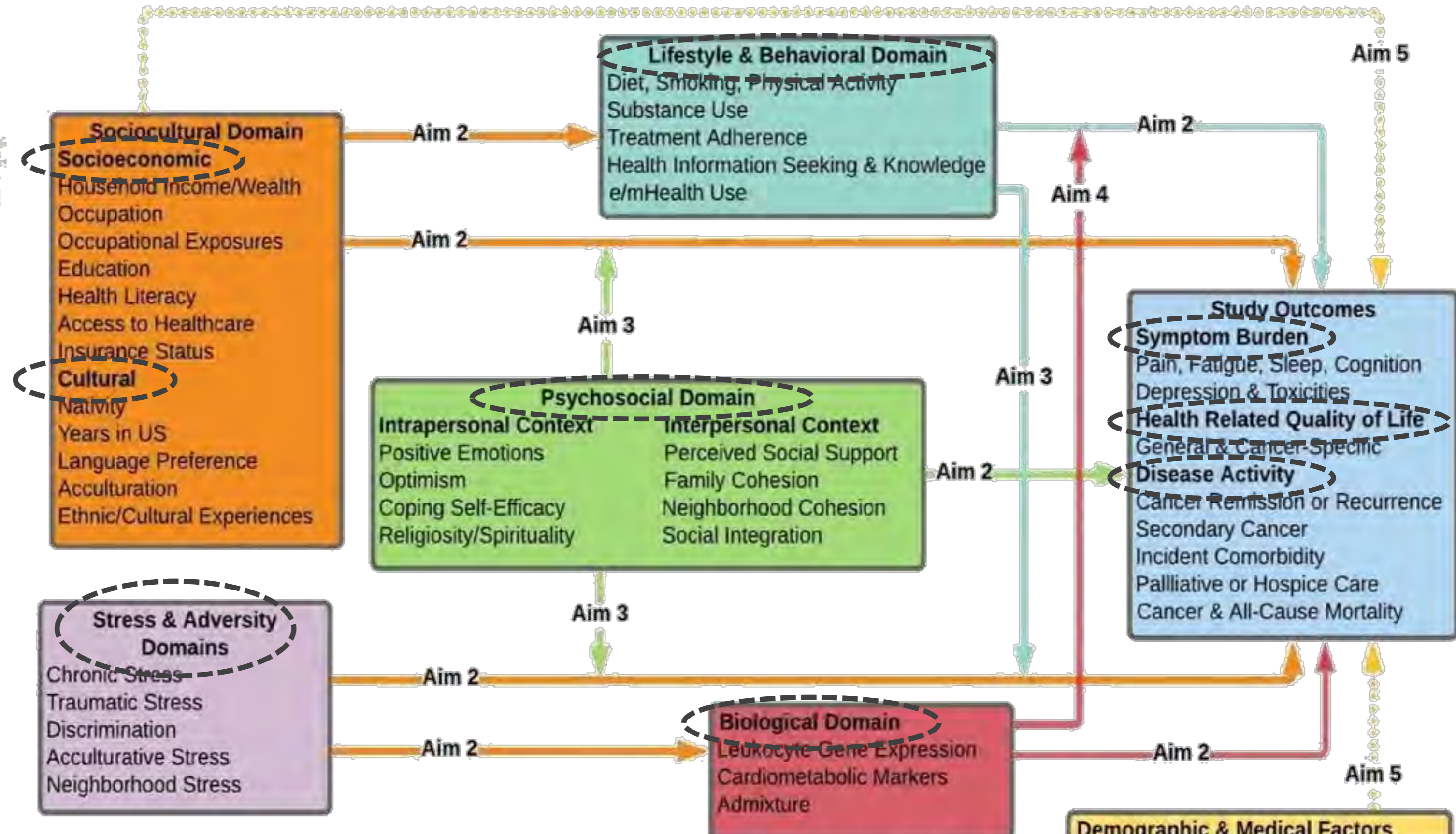


## EHR Integrated Psychosocial Intervention

# Ongoing Work: Hispanic/Latino Cancer Survivorship Cohort Study



- UG3/UH3 – 6-year study
- Longitudinal cohort
- N=3,000
- 50% Mex Am/50% Other
- 50% Female
- ~70% Ca Ctr
- ~30% State Registry
- ~30 Rural
- 8 Solid Tumors
- N distribution reflects rates seen in FL and TX



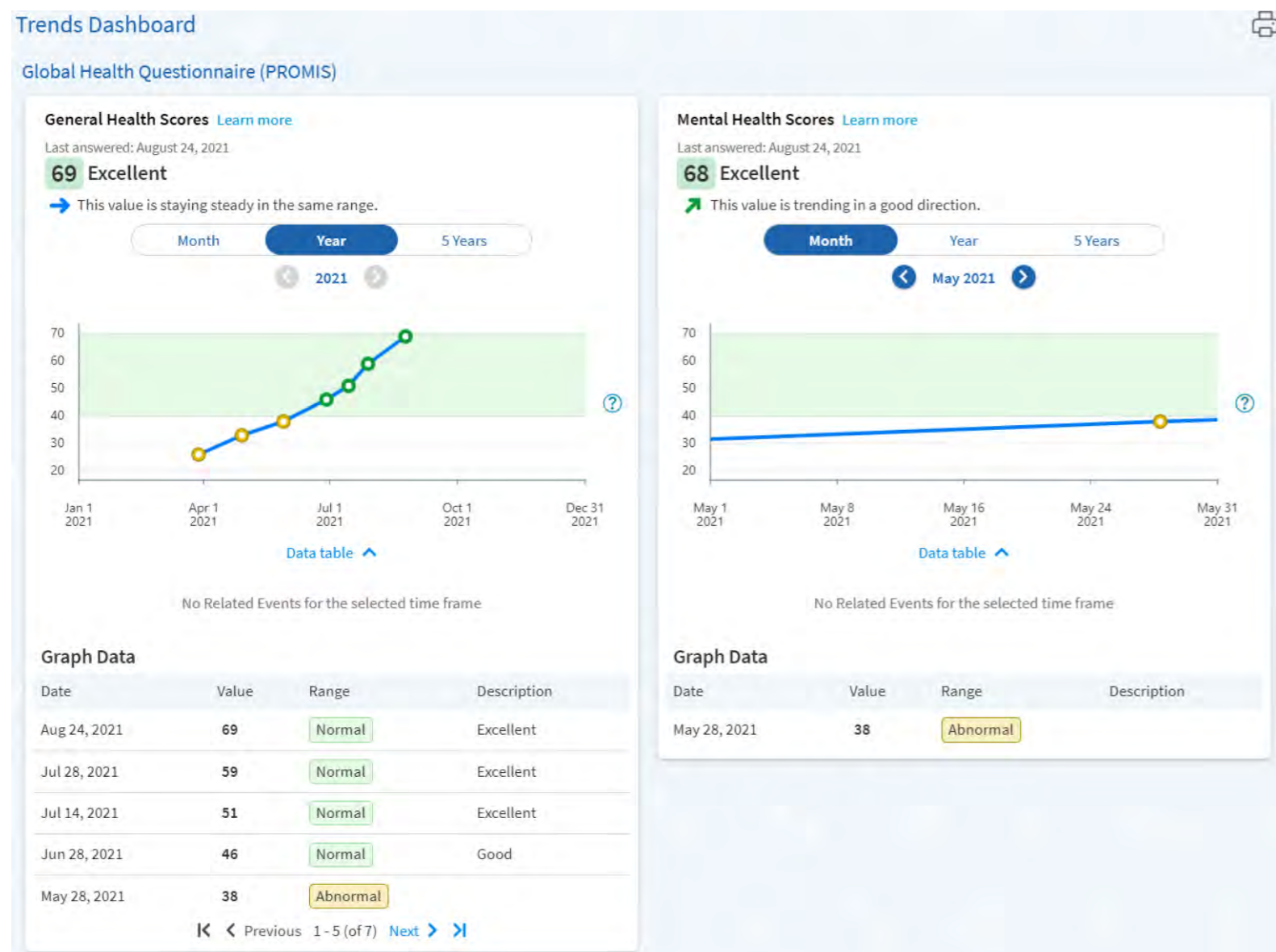
**Figure 1. Conceptual Model and Test of our Specific Aims.** Figure 1 depicts our Integrated Model of Biopsychosocial Determinants of Health Outcomes in H/L Cancer Survivors which forms the basis of the conceptual organization of the cohort measures, proposed aims and hypothesized relationships. Pathways leading to boxed domains represent proposed direct associations, while pathways leading to lines represent mediation or moderation pathways. Dashed paths represent select tests of moderation.

**Demographic & Medical Factors** (e.g.) Age, Gender, Cancer Type & Stage, TX Type & Dosage, Time Since DX & TX, Comorbidities, Environmental Exposures, C19 Experiences, Viral & Bacterial Infections

# Ongoing Work: EHR Integrated & Risk Stratified Assessment and Intervention

## Patient-Facing Engagement Tools: Enhanced Visualization

My  Wellness Check



## PRO-Guided Pragmatic Trial: Elevated Depression SxS

Northwestern Medicine

My  Wellness Check

**Purple Chill**

- Deep Breathing**  
Reduce stress. Minimize headache anxiety.
- Muscle Relaxation**  
Good exercises to try after Deep Breathing.
- Repetition Practice**  
Repetition of words and phrases that promote relaxation.
- Visualization**  
Imagining a relaxing scene.
- Mindfulness**  
Focusing on the present moment.
- Sleep**

**Worry Knot**

- Learn**  
Learn more about worries, Tangled Thinking, and problem solving from the lesson library.
- Practice**  
Practice beating Tangled Thinking with this exercise.
- Review**  
Review your practice sessions to see how well you did.

**Current Track**  
Introduction to Mindfulness

**A distraction from your worries...**  
Tell yourself some positive statements: 'Its knot the end of the world'

## Evidence-Based Interventions: Specific Populations (PACA, HSCT, HIV+ CA SURV)

 **SmartManage**  
TOOLS FOR HEALTHY LIVING

SmartManage TOOLS FOR HEALTHY LIVING

DASHBOARD | EXTERNAL RESOURCES | FAVORITES | MY ACCOUNT

Hi, Roberto Benzo

Welcome to the Program! We're happy you're here.  
- Dr. Frank Penedo

Achievements and Events

View all achievements and events

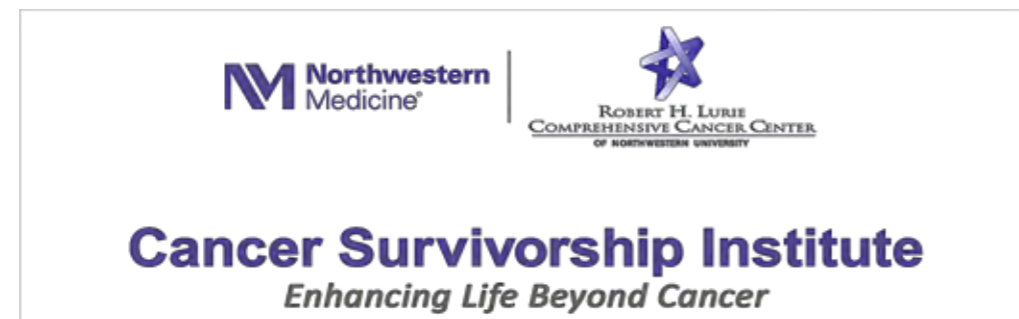
SmartManage-PanCa Sessions and Materials:

- Week 1: Introduction to Program
- Week 2: Stress Awareness
- Week 3: Cognitive Distortions
- Week 4: Cognitive Restructuring
- Week 5: Coping

# I Acknowledgements...



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- Our staff & dedicated participants





**CANCER**  
**SURVIVORSHIP**

TRANSLATIONAL  
& BEHAVIORAL  
SCIENCES

SUPPORT / RESEARCH / THRIVE

Thank you!

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A Cancer Center Designated by the  
National Cancer Institute