

# Using PROMIS tools to assess change in patient's experience of anxiety, depression, and pain among cancer survivors in a survivorship clinic.



UNIVERSITY OF  
MICHIGAN

## Sarcoma Survivorship Program

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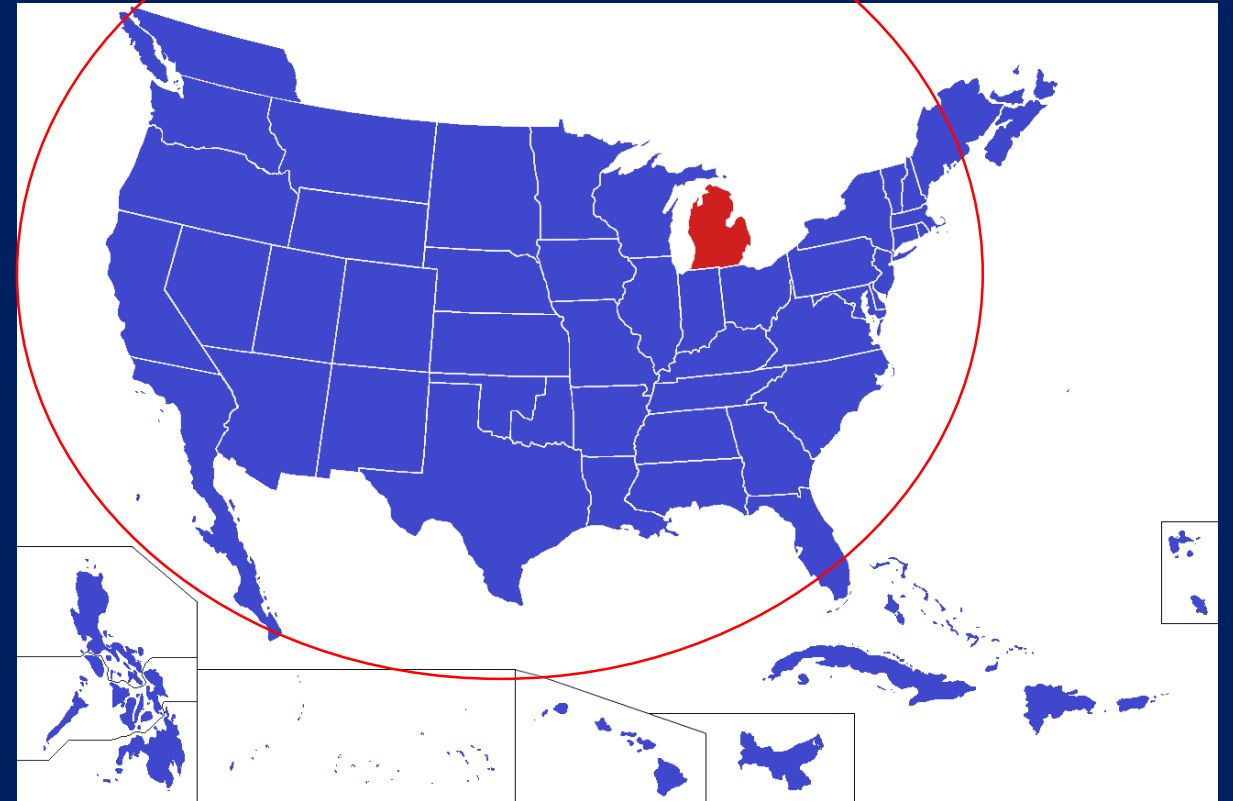
Anao Zhang, LCSW/PhD



# Sarcoma is rare.

- 0.2-0.6 per 100,000 people\*
- 2-3% of childhood cancer\*
- 800-1000 pediatric cases/yr. in the U.S.\*\*
- Estimated 24-30 cases/yr. in Michigan
- 70% survival rate

- Burningham Z, Hashibe M, Spector L, Schiffman J. The Epidemiology of Sarcoma. *Clinical Sarcoma Research*. 2:14, 2012.\*
- Ward, E., DeSantis, C., Robbins, A., Kohler, B. and Jemal, A. Childhood and adolescent cancer statistics. *Cancer Journal for Clinicians* 64: 83–103, 2014.\*\*



We are the only Sarcoma  
Survivorship Program in the US.

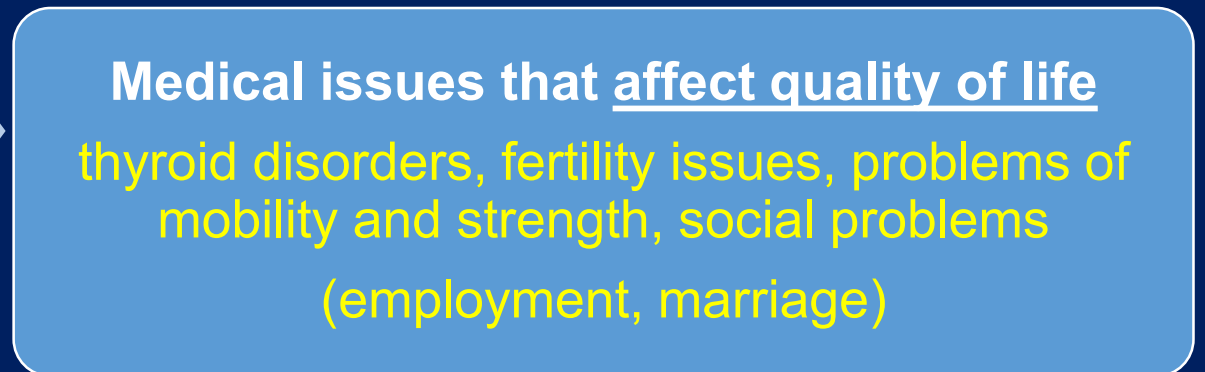
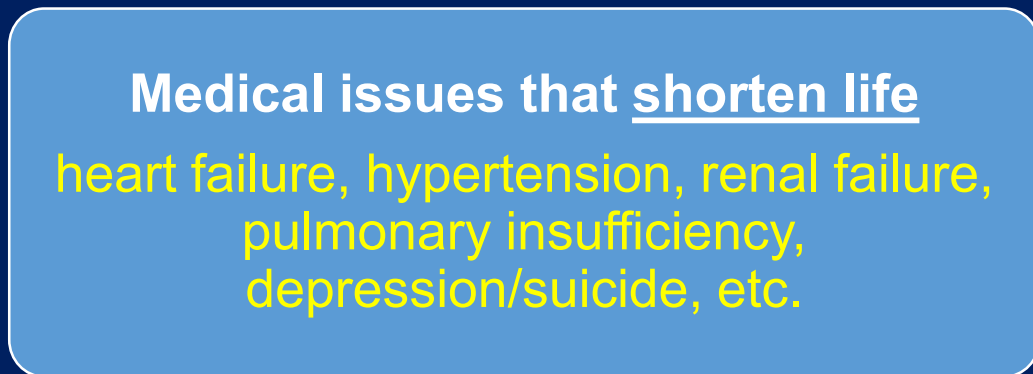
# Progress in Sarcoma

Therapeutic  
Advances  
Fewer amputations

More Sarcoma Patients Cured  
70% of Ewing &  
Osteosarcoma  
50 % of Rhabdomyosarcoma

Sarcoma recurrence  
Second cancers  
Chronic Health Conditions  
Heart disease  
Hypertension  
Type 2 diabetes  
Lipid disorders  
Renal failure  
**Anxiety, depression**  
**Suicide**

# Impact of Sarcoma Treatment

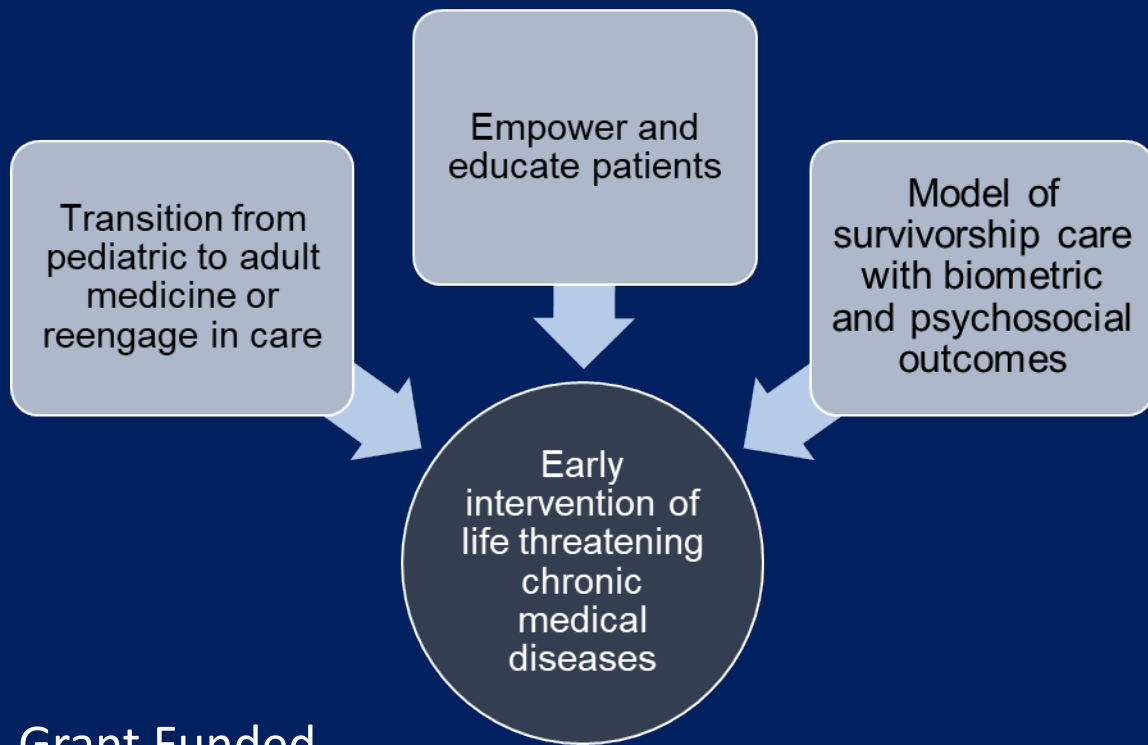


# Cancer Survivorship

- **20,000 children are diagnosed yearly with cancer**
- **Nearly 70% are cured**
  
- Among survivors:
  - 2/3 had chronic health problem
  - 25% had severe or lethal chronic condition
  - 25% had 3 or more chronic health problems

# M | SARCOMA SURVIVORSHIP PROGRAM

→ improve long-term function, reduce debilitating symptoms, and potentially reduce mortality



- Grant Funded
- IRB: HUM00095825

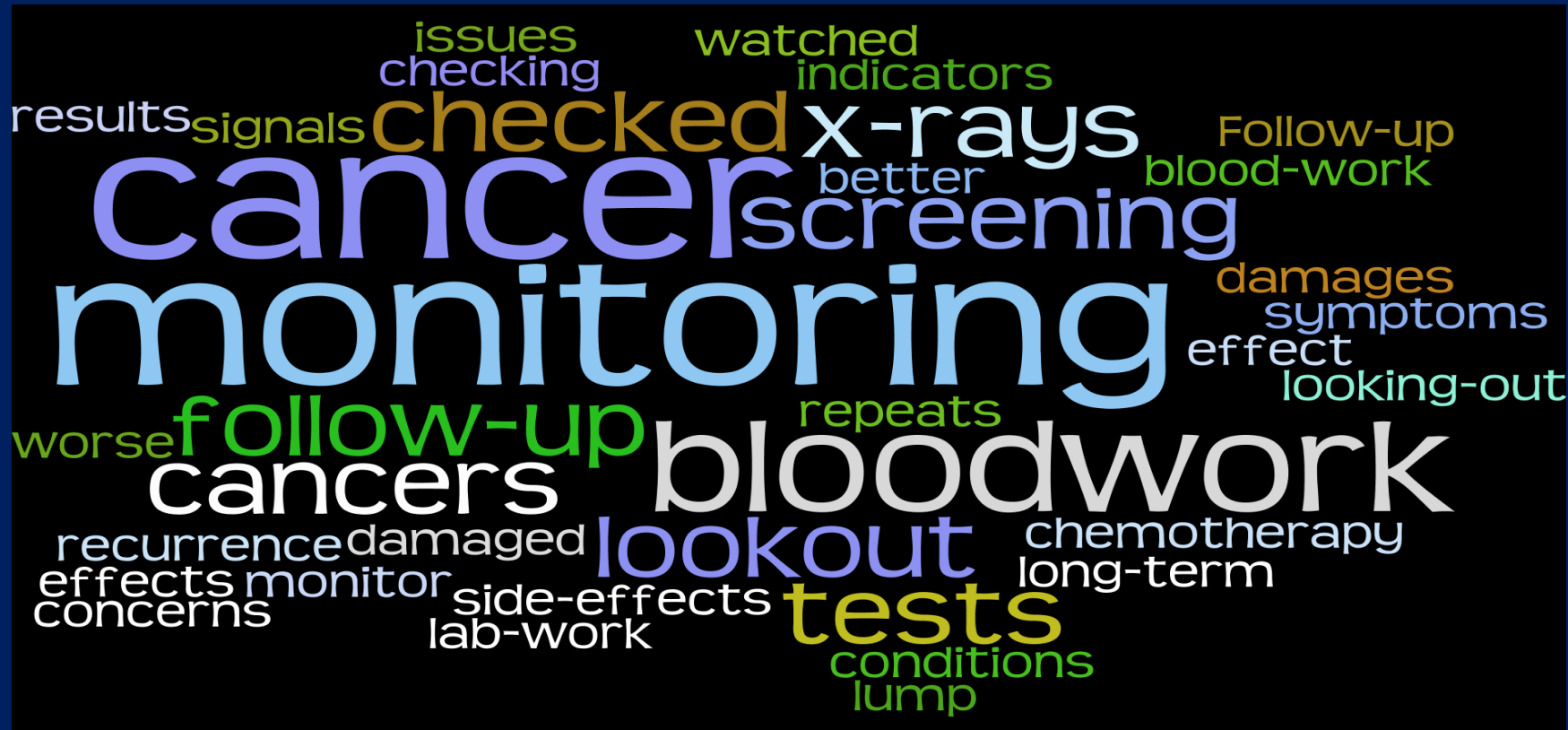
## Eligibility

- 18 years or older
- 2 years post-treatment
- No current diagnosis of secondary cancer
- Does not have to have received their cancer treatment at U of M or be a current patient.

# PROs+ Education + Regular Clinic Visits

- Anxiety and Depression is a prominent consequence of cancer treatment\*.
  - Fear of Recurrence, reduced physical function, chronic pain.
- Survivorship care includes patient education, diagnosis, and management of chronic conditions- including anxiety and depression.
- Survivorship care should be more than monitoring for recurrence.

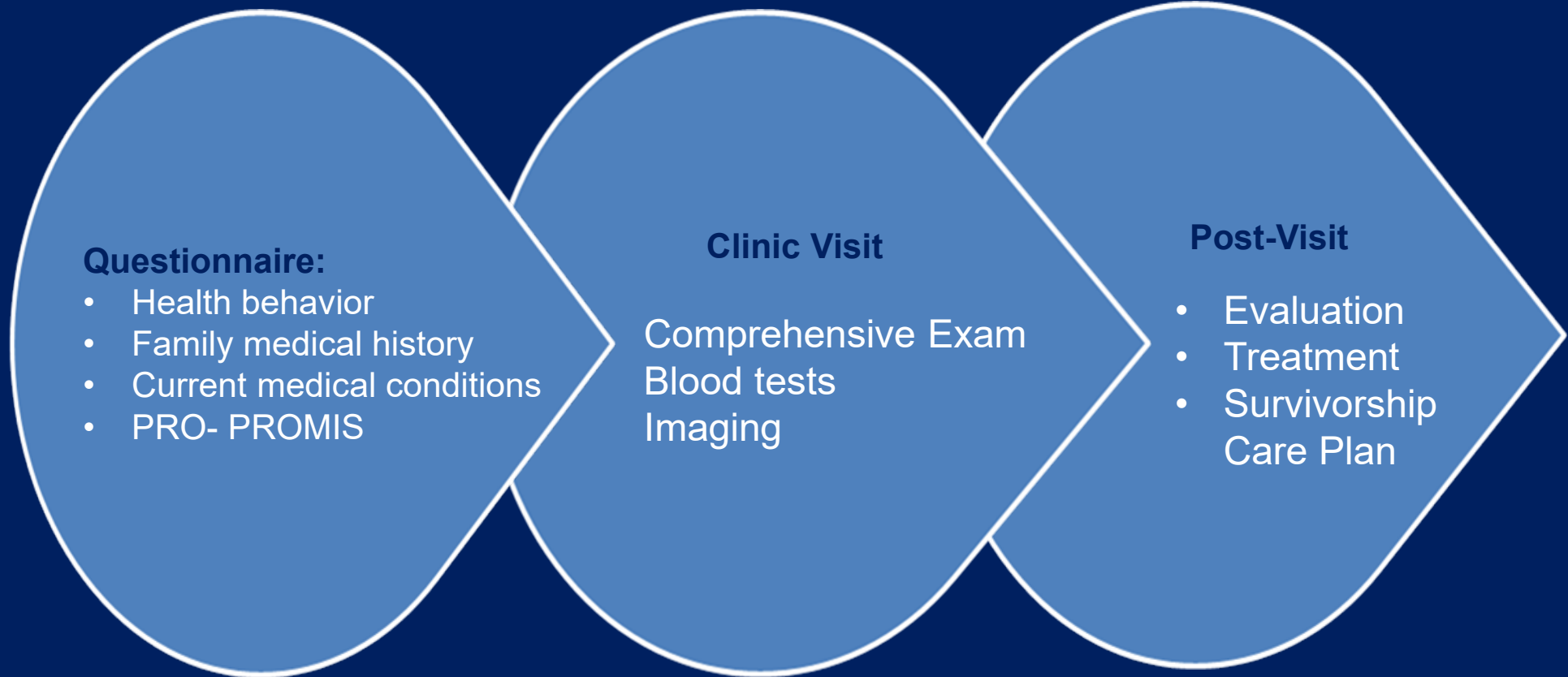
*What does survivorship care mean to you?*



*"I don't want to spend my whole life constantly freaking out that something bad is going to happen to me."*



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# Patient Cohort

- 50% of cohort are aged 18-39
- 14 years- mean time between diagnosis and first visit

	Count	Median	Range
Age at diagnosis	67	26.5	2-67
Age at first visit	67	42	18-82
Sex	Count	Frequency	
Female	39	58%	
Male	28	42%	
Race/Ethnicity			
White/Caucasian	66	98.5%	
Hispanic	1	1.5%	
Black/African American	1	1.5%	
Asian	0	0	
Other	2	3%	
Sarcoma Type			
Bone	25	37%	
Soft Tissue	42	63%	
Treatment History			
Chemotherapy	59	88%	
Radiation	31	46%	
Surgery	64	96%	

# Positive change in PROMIS measures across domains

	Baseline (T1)	12 months (T2)	24 months (T3)	T-score change
	Mean (SD)	Mean (SD)	Mean (SD)	T3-T1
	N=67	N=31	N=21	
<b>Global Mental Health v1.2</b>	49.2 (7.9)	52.0 (7.9)	52.8 (5.2)	3.6 (+)
<b>Global Physical Health v1.2</b>	49.9 (6.3)	52.2 (6.8)	53.5 (6.4)	3.6 (+)
<b>Pain interference CaBank v1.1*</b>	51.5 (9.3)	48.7 (7.3)	48.0 (9.0)	3.1 (-)
<b>Anxiety 8a</b>	49.9 (9.6)	45.9 (10.6)	48.1 (8.5)	1.8 (-)
<b>Depression 8a</b>	47.6 (9.1)	45.8 (8.9)	44.4 (6.2)	3.2 (-)
<b>Physical Function CaBank v1.1*</b>	48.0 (9.2)	51.6 (8.8)	52.6 (8.7)	4.6 (+)
<b>Sleep Disturbance 6a</b>	50.1 (8.8)	48.9 (7.8)	47.2 (7.7)	2.9 (-)

# Patients report PROMIS measures enhance clinical care and are easy to use

Patient Survey Results (n=29)	
	MEAN / SD
<b>Overall Experiences / Preferences</b>	
• I prefer to complete the health questionnaire electronically.	4.69 / .541
• I like being able to complete the health questionnaire at my own pace.	4.76 / .577
• I like being able to complete the health questionnaire in a place I am comfortable.	4.59 / .733
<b>Ease of Completion</b>	
• Overall, the health questionnaire was easy to complete.	4.43 / .634
• The health questionnaire was too long.	2.79 / 1.013
<b>Supportive of Clinical Care</b>	
• The health questionnaire asked me about a wide range of issues.	4.14 / .848
• My provider asked me about a wide range of health concerns because of the health questionnaire.	4.21 / .917
• The health questionnaire made me more comfortable talking about my health concerns	4.21 / .619

# PROs+ Education + Regular Clinic Visits = Improved Quality of Life?

- Administering multiple PROMIS measures is feasible.
- Patients value PROs in enhancing the clinical experience.
- Patients report a positive change in PROs over time.
- *“(Survivorship care) made me say, well, as they are willing to put the effort in, take care of yourself.”*
- *“I know that even if once a year he is looking at what my blood tests are showing and what is going on with my body, that gives me a high level of comfort.”*

# Thank you

Questions?

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