



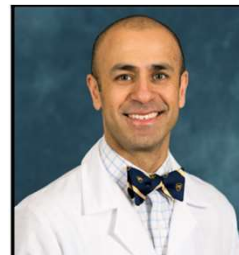
SOCIAL

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SOCIAL: Surviving Ovarian Cancer – Innovation, Advancement, and Living Well

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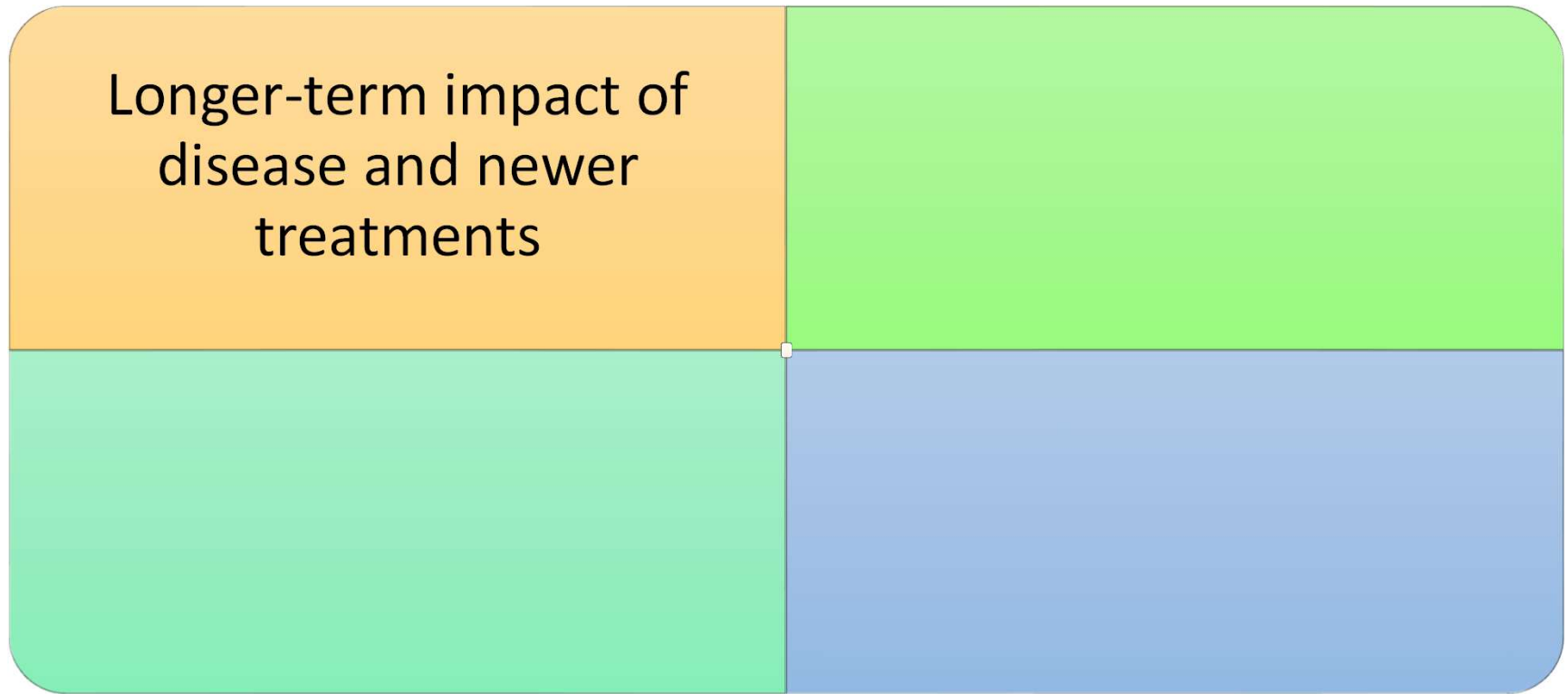
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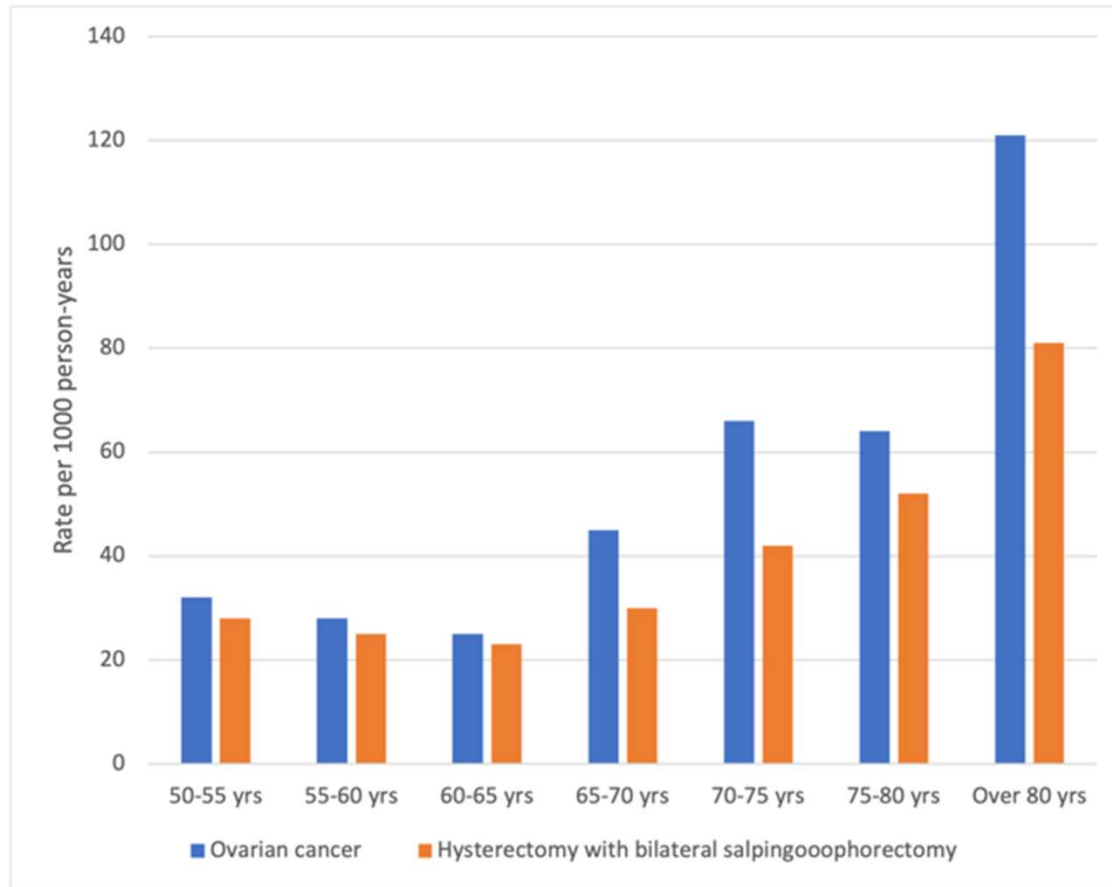
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There is a lot to learn about ovarian cancer survivorship.



Older ovarian cancer survivors are more likely to have fall-related injuries.



There is a lot to learn about ovarian cancer survivorship.

Longer-term impact of disease and newer treatments

Role of lifestyle factors after diagnosis

Most studies have examined lifestyle factors before diagnosis with ovarian cancer survival.

Survival Associations

<u>No association</u>	<u>Better survival</u>	<u>Worse survival</u>
Oral contraceptives	Menopausal HT	Large body size
Parity	Green tea	Smoking
Breastfeeding		Physical inactivity
Medical conditions		
Tubal ligation		
Diet		

Lifestyle

- Diet (*Healthy Eating Index*)
 - Physical activity
 - Obesity
 - Smoking
 - Alcohol
- ➔ **Healthy Lifestyle Index**

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CANCER EPIDEMIOLOGY

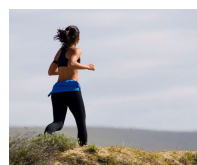


A healthy lifestyle and survival among women with ovarian cancer

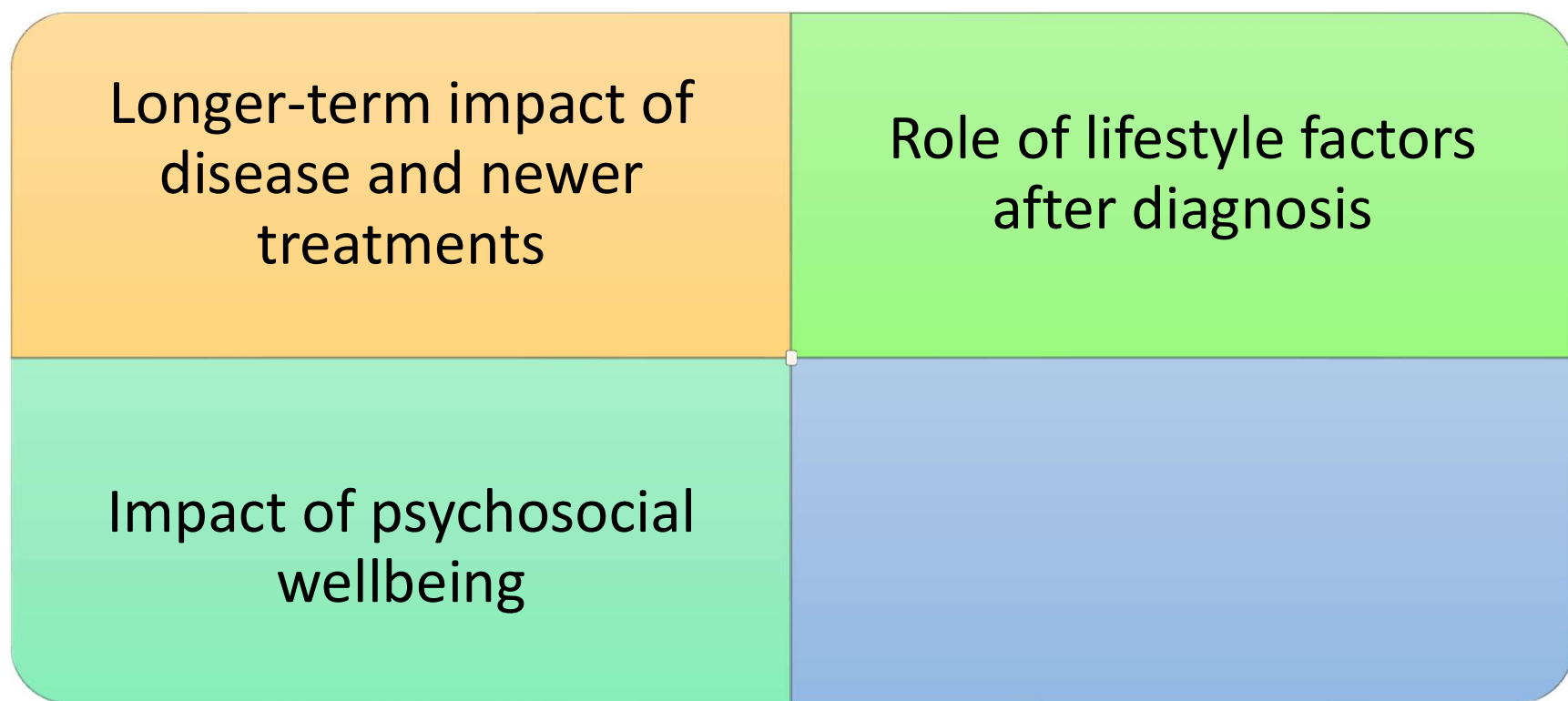
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12 Months Post-Diagnosis	Least healthy	Middle	Most healthy
Healthy Lifestyle Index	1.0	0.79 (0.5-1.2)	0.61 (0.4-0.9)
Diet	1.0	1.23 (0.8-1.9)	1.01 (0.6-1.6)
Physical activity	1.0	0.61 (0.4-1.0)	0.60 (0.4-0.9)
Body-size*	1.05 (0.7-1.6)	1.14 (0.8-1.7)	1.0
Smoking*	2.82 (1.3-6.1)	2.19 (1.5-3.1)	1.0
Alcohol*	0.69 (0.5-1.1)	0.77 (0.5-1.2)	1.0

*Smoking: Current, Former, Never; Alcohol: >10, ≤10, 0 g/day; BMI: >30, 25-29.9, <25kg/m²

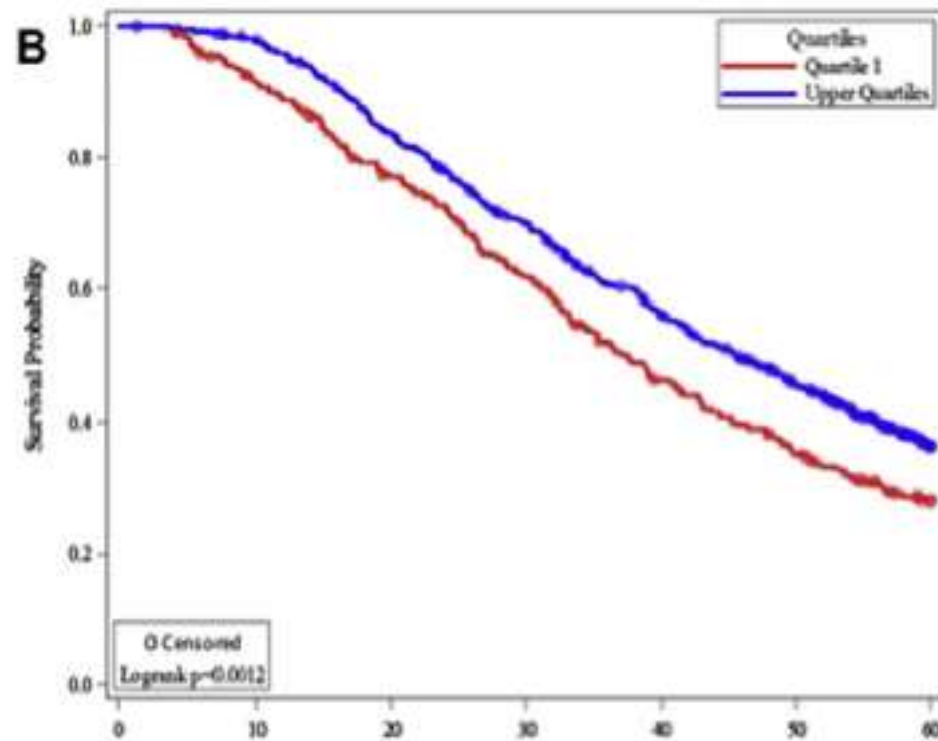


There is a lot to learn about ovarian cancer survivorship.



A GOG study found higher QoL was associated with better survival with advanced stage ovarian cancer.

: *Oncology* 147 (2017) 98–103



A Kaiser Permanente study found that depression was associated with worse survival.

Null Results in Brief

Predictors of Long-Term Survival among High-Grade Serous Ovarian Cancer Patients

Christina L. Clarke¹, Lawrence H. Kushi², Jessica Chubak³, Pamala A. Pawloski⁴, Joanna E. Bulkley⁵, Mara M. Epstein^{6,7}, Andrea N. Burnett-Hartman¹, Bethan Powell⁸, Celeste L. Pearce⁹, and Heather Spencer Feigelson¹

**Cancer
Epidemiology,
Biomarkers
& Prevention**



People with depression were 65% less likely to live 7+ years than people without depression.

There is a lot to learn about ovarian cancer survivorship.

Longer-term impact of disease and newer treatments

Role of lifestyle factors after diagnosis

Impact of psychosocial wellbeing

Allostatic load
(cumulative wear and tear)

Allostatic load is the cumulative wear and tear on the body from physical, structural, and psychosocial experiences throughout life.

- Allostatic load is strongly associated with a range of health conditions, including cardiovascular mortality, depression, and pregnancy outcomes.
- In ovarian cancer, life stress, both early and recent, was associated with prolonged anxiety and cortisol dysregulation during the first year of survivorship.
- Associations between depression and survival have been reported in patients with higher cortisol levels.

To our knowledge, there are no population-based ovarian cancer survivorship studies of allostatic load.

Our goal is to understand the experiences of ovarian cancer survivors in Michigan.



SOCIAL is a very inclusive study.

Aim 1 – Establishing the cohort.

➤ Inclusion criteria:

- Residence in the state of Michigan at least part of the year
- Invasive epithelial ovarian/fallopian tube/peritoneal cancer
- Diagnosed within the last 15 months
- Ages 18-79

➤ Exclusion criteria:

- <18 years of age
- 80+ years of age
- Male sex at birth

➤ No restrictions on participation in other clinical trials

➤ Participation independent of disease status

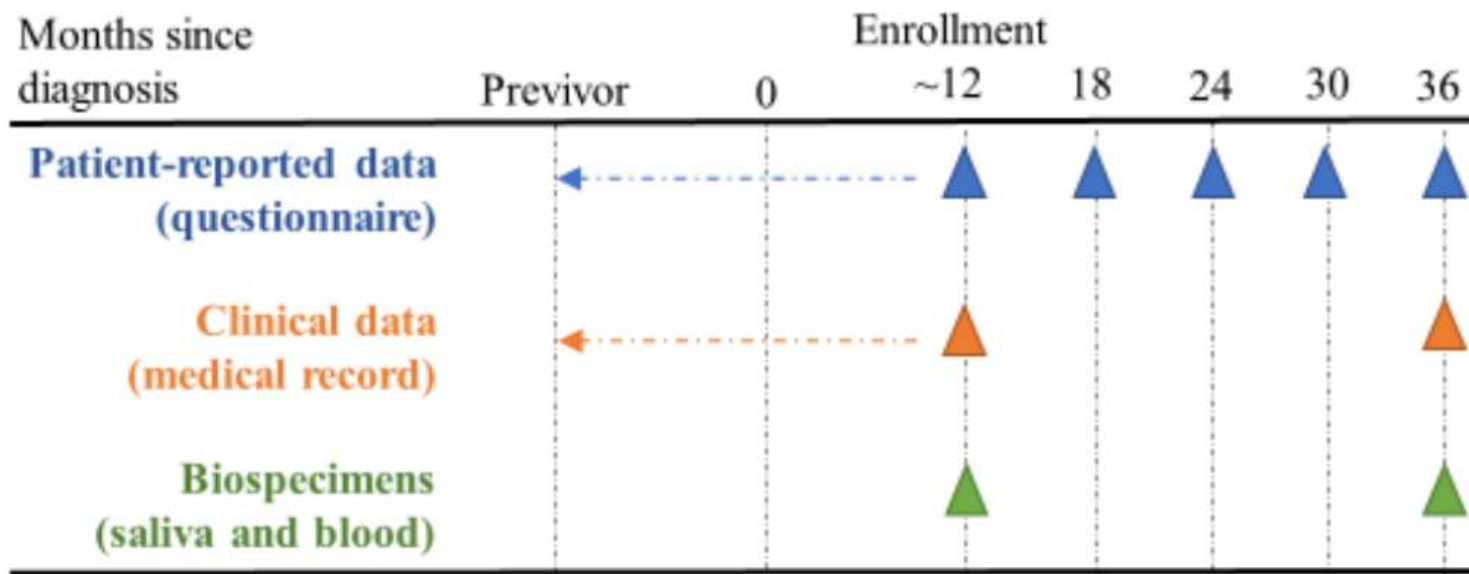
Participation in SOCIAL is straightforward.

- Remote enrollment
 - Electronic consent
 - Online questionnaires

- Medical record data abstraction by research team

- Biospecimens
 - Kit mailed to participants
 - Collection at provider's office

Multiple data points will be collected.



Patient-reported data for 10 years.

Clinical data will be obtained every 3 years.

Figure 1. Data and biospecimen collection timeline. The arrow lines indicate that data from the previvor period and the acute survivorship period will be collected.

Aim 2

- ❑ **To characterize treatment experiences for women in the Michigan SOCIAL cohort.**
 - The type of treatment and the outcomes among women receiving different treatments.

- ❑ We will address questions such as which survivorship health needs are associated with specific treatments.
 - Do people with ovarian cancer receiving different treatments report significantly different QoL and psychosocial wellbeing?
 - How do patient-level factors, including pre-existing comorbidities, affect QoL following these treatments?

Aim 3

□ To evaluate the impact of previvor and survivorship period lifestyle exposures including medication use, physical activity, smoking, and diet on ovarian cancer outcomes.

➤ Although there is some evidence that exposures during the previvor period play a role in survival, we seek to expand these findings and integrate both previvor exposures and the impact of exposures after diagnosis, including changes in behavior, on associations with ovarian cancer outcomes.

Questionnaires

- Six questionnaires with validated questions, ~10 minutes each to complete

Section 1: Your Background

Section 2: Your Wellbeing

Section 3: Your Disease Outcomes

Section 4: Your Lifestyle

Section 5: Your Personal Health

Section 6: Your Family History

+ Medical Record
Data Abstraction

Wellbeing

Domain	Questionnaire
Physical wellbeing	FACT-O/G/B Physical Wellbeing
Social/family wellbeing	FACT-O/G/B Social/Family Wellbeing
Emotional wellbeing	FACT-O/G/B Emotional Wellbeing
Functional wellbeing	FACT-O/G/B Functional Wellbeing
Social support	PROMIS Instrumental Support Perceived Social Support in HRS
Financial wellbeing	COST-FACIT
Spiritual wellbeing	FACIT-Sp
Barriers to care	GYN-COE
Coping	Brief-COPE
Optimism	LOT-R
Social satisfaction	PROMIS Satisfaction with Social Roles (SF8A) 4a
Social participation	PROMIS Social Isolation 4a
Life meaning	Ryff & Keyes
Stress	PSS-4
Depression	CESD-10 PSQ-2
Anxiety	GAD-7
Everyday discrimination	Everyday discrimination

Lifestyle

Domain	Questionnaire
Physical activity	IPAQ BRFSS The Sister Study OPAL ovarian cancer study WHI AACES
Smoking	MI-CARES
Alcohol consumption	MI-CARES
Diet	MI-CARES

Outcomes

Domain	Questionnaire
Ovarian cancer specific outcomes	FACT-O Ovarian Cancer
Fatigue	FACIT Fatigue Scale
Fibromyalgia	Fibromyalgia Survey Questionnaire
Other symptoms	FACT-GOG-NTX NFOSI-18
Pain	PROMIS Pain 3a
Cognition	PROMIS Cognitive Function 8a
Sleep	PSQI
Sexual health	EORTC SHQ-C22

Aim 4

- ❑ To define the allostatic load of ovarian cancer patients through comprehensive biomarker analyses.

- ❑ Allostatic Load Domains:
 - neuroendocrine (DHEA-S and cortisol through biospecimen collection)
 - cardiovascular (systolic and diastolic blood pressure from the clinical data)
 - metabolic (total cholesterol, high-density lipoprotein [HDL], low-density lipoprotein [LDL], triglycerides, and glucose from the clinical data)
 - immune (CRP and IL6 through biospecimen collection)
 - anthropometric (body mass index from clinical data)

Data storage will be secure.

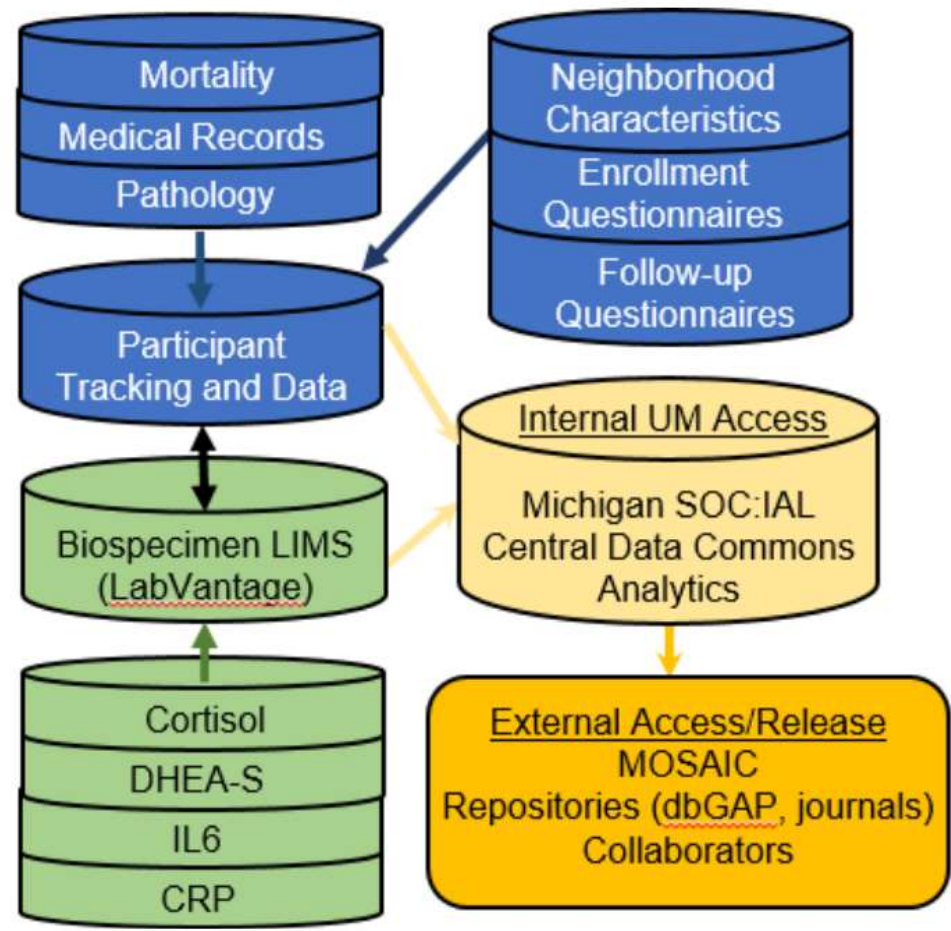


Figure 2. Michigan SOC:IAL Central Data Commons

Additional Goals / Return of Value

❑ Immediate – Creating Community

- Webinars
- Website information, newsletters, lectures

❑ Long-term – Improving Outcomes

- Interventional trials
- Strategies to enhance survivorship well-being
- Strategies to enhance survival, such as statins, aspirin, hormonal therapy, green tea extract

We are hoping for your partnership to refer survivors.



Website: mi-social.sph.umich.edu
Email: mi-social@umich.edu

FLYERS:




Study ID: HUM00211725 IRB: IRBMED Date Approved: 10/9/2023 Expiration Date: 10/8/2024

SOCIAL - Surviving Ovarian Cancer - Innovation, Advancement and Living Well

Our Goal: To understand the factors that can help ovarian cancer survivors thrive.

Recruiting **women diagnosed with ovarian cancer in the past 6-15 months** who are between the **ages of 18-79**.

What is involved in this study?

 <p>Learn about the study and if you want to participate, sign the consent. This takes about 10 minutes.</p>	 <p>Complete an initial questionnaire that has six sections. Each section takes about 10 minutes.</p>	 <p>Provide a blood and saliva sample at enrollment and after two years of follow-up. We will mail you a kit.</p>	 <p>Provide questionnaire updates every six months for two years and then each year after that.</p>
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You will receive a \$25 gift card as a thank you after you finish the questionnaire.

You will have access to...

- Webinars and infographics about new findings related to ovarian cancer.
- Information on wellness activities for cancer survivors.

Study ID: HUM00211725 IRB: IRBMED Date Approved: 10/9/2023 Expiration Date: 10/8/2024

Use your phone camera to scan this QR code to learn more about SOCIAL

