

URBAN-RURAL DISPARITIES IN CANCER CARE DELIVERY

Ekaterina I. Noyes, PhD, MPH

Professor and Associate Dean

Department of Epidemiology and Environmental Health
School of Public Health and Health Professions

Professor of Surgery and Director

Surgical Outcomes And Research (SOAR) Center
Department of Surgery
Jacobs School of Medicine and Biomedical Sciences

Adjunct Professor of Oncology

Roswell Park Comprehensive Cancer Center
Buffalo, NY



Cancer Survivorship Care Paradigm

Prevention

of recurrent and new cancers and late effects

Surveillance

for metastasis, recurrence, or secondary cancers; assessment of medical and psychosocial late effects

Intervention

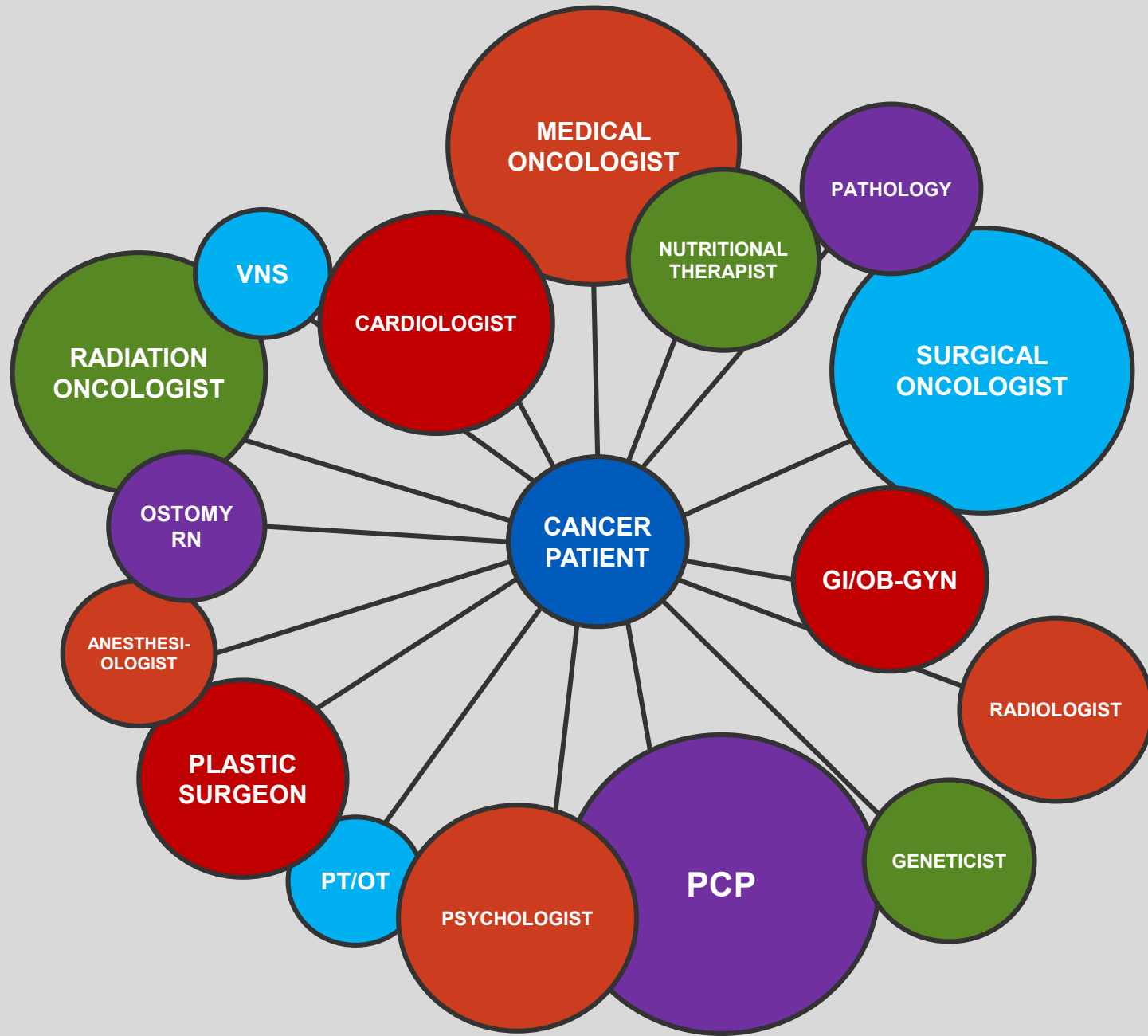
for impacts of cancer and its treatment

Coordination

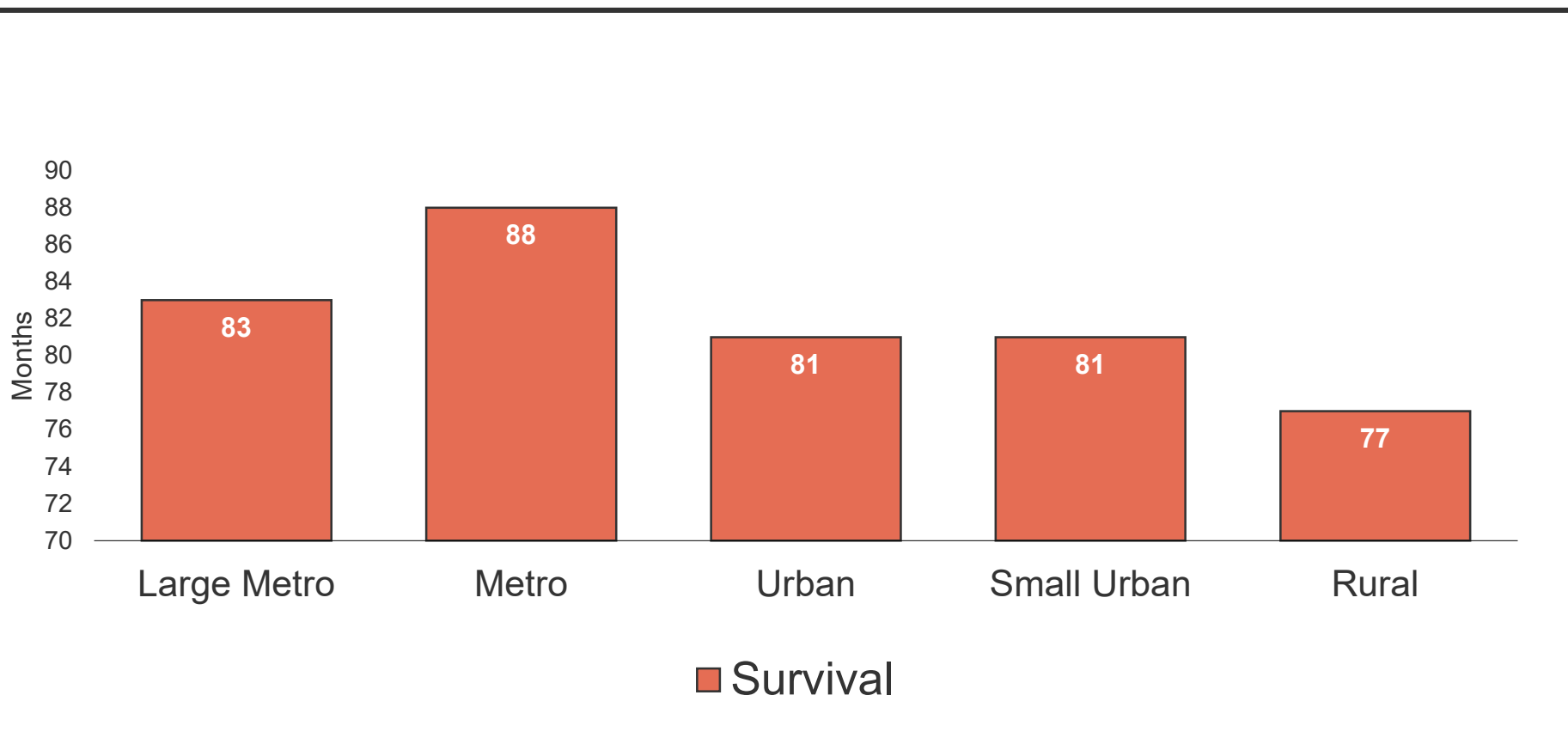
between specialists and primary care providers



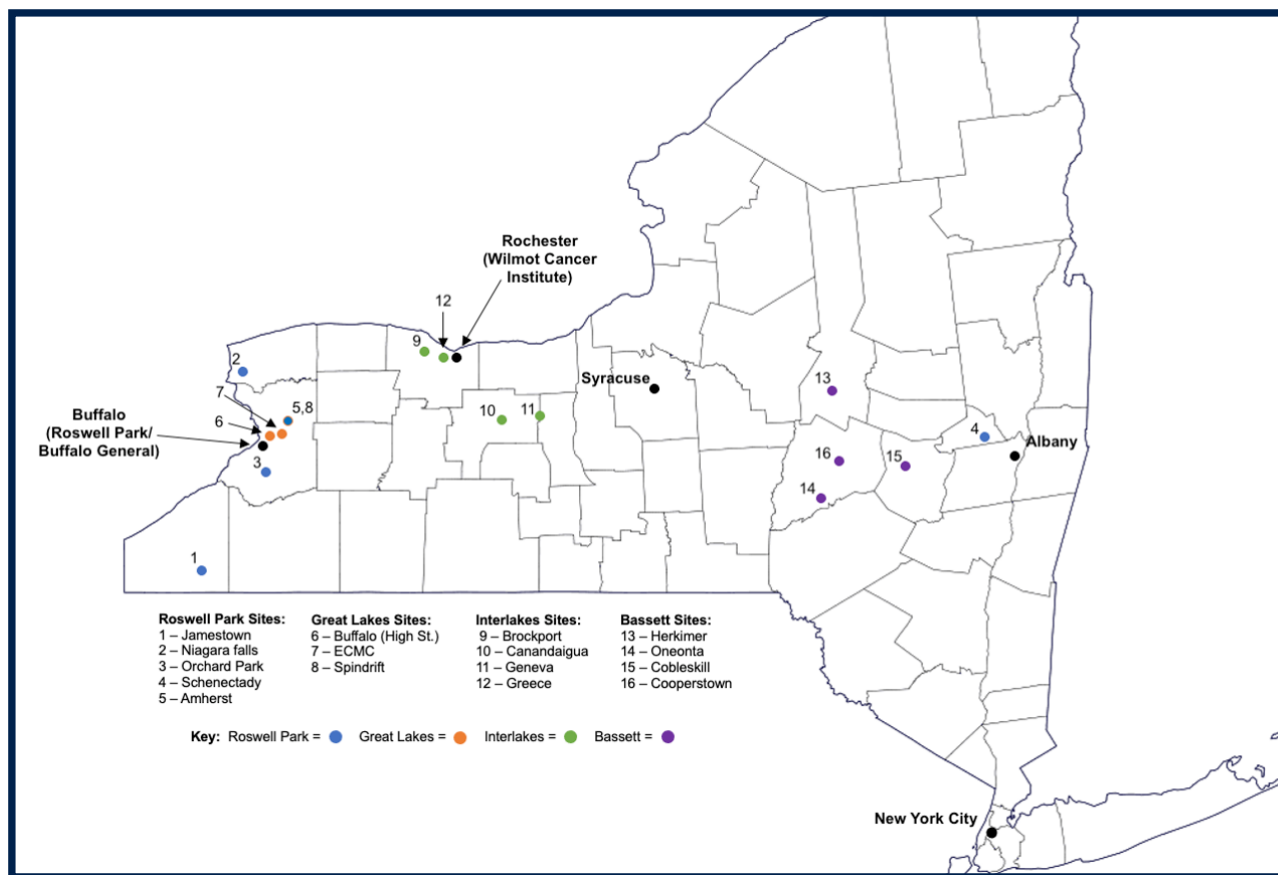
Appointment roster for a new breast cancer patient



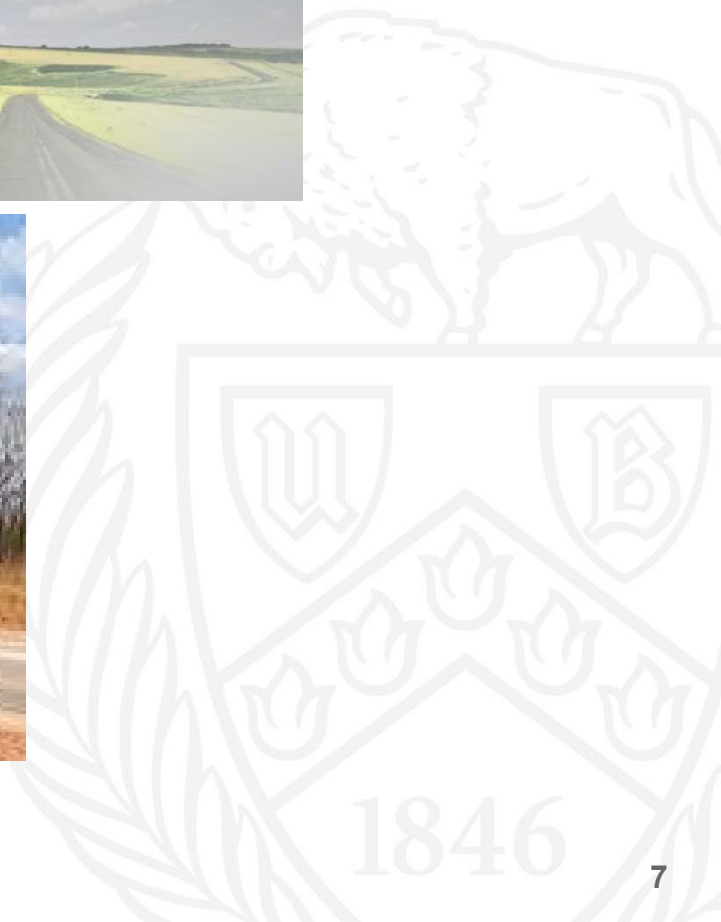
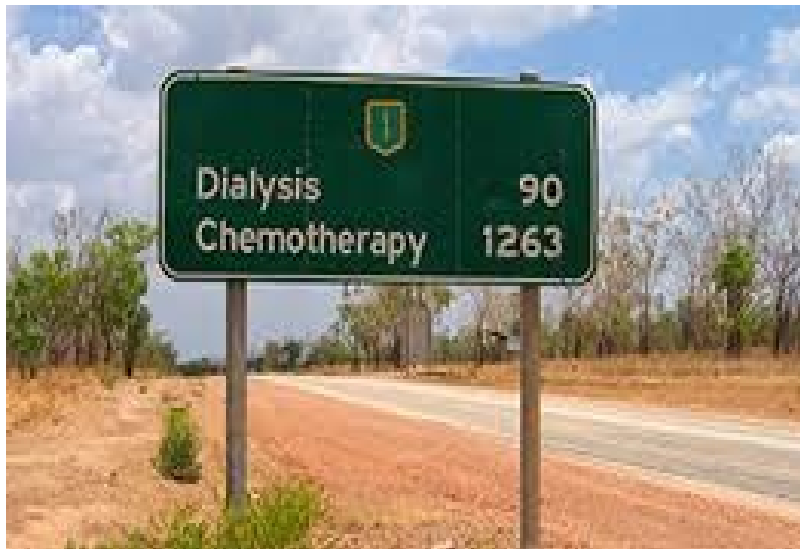
Median Survival Months by County Population for Patients with Colorectal Cancer SEER 17 Registries, 1992-2002



Cancer care providers in Upstate New York



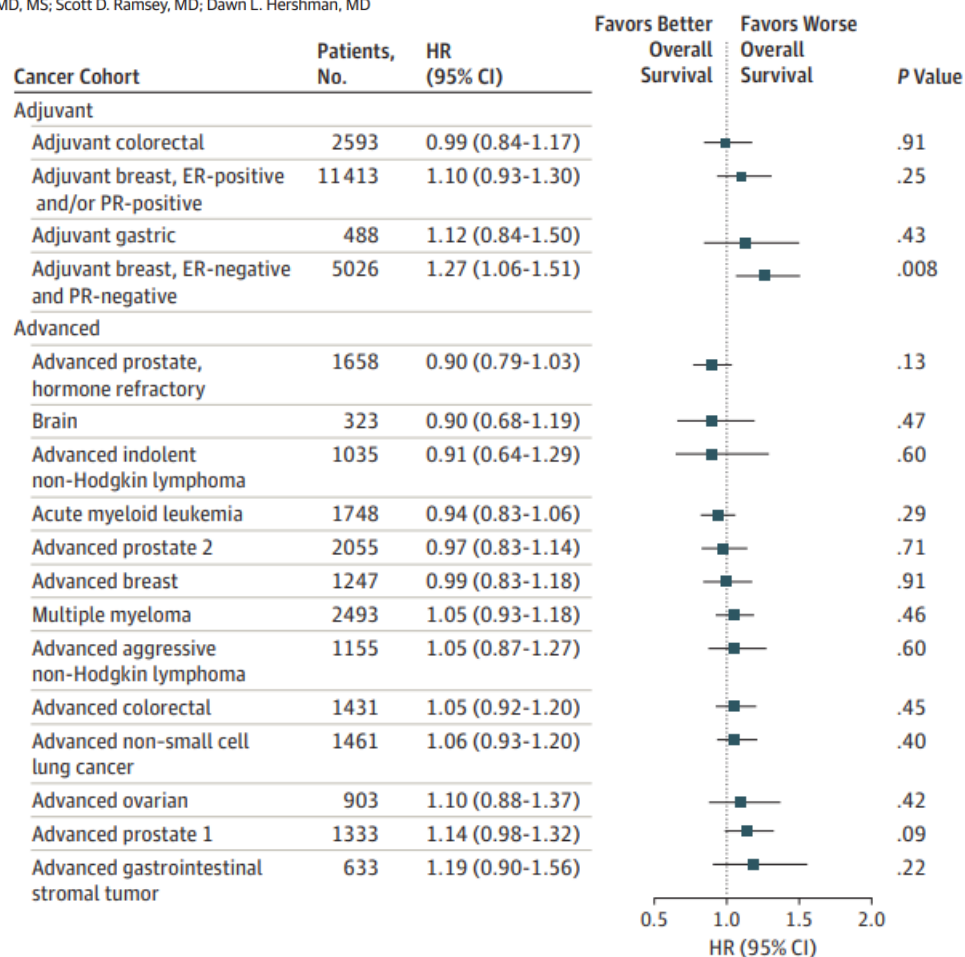
Reasons behind rural-urban disparity in health outcomes



Original Investigation | Health Policy

Geographic Distribution and Survival Outcomes for Rural Patients With Cancer Treated in Clinical Trials

Joseph M. Unger, PhD, MS; Anna Moseley, MS; Banu Symington, MD; Mariana Chavez-MacGregor, MD, MS; Scott D. Ramsey, MD; Dawn L. Hershman, MD



Special Series: NCI-ASCO Teams | ORIGINAL CONTRIBUTION

Regional Multiteam Systems in Cancer Care Delivery

*Katia Noyes, PhD, MPH, John R.T. Monson, MD, Irfan Rizvi, MD, Ann Savastano,
James S.A. Green, MD, and Nick Sevdalis, PhD*

- ¹ University of Rochester Medical Center, Rochester, NY
- ² St. James Mercy Hospital, Hornell, NY;
- ³ American Cancer Society, Hope Lodge, Rochester, NY
- ⁴ Barts Health, London, UK;
- ⁵ Center for Implementation Science, King's College
London, London, UK

Case Study: Mrs. M

Age	64
Sex	Female
Family status	Widowed
Health insurance	Medicaid
Comorbidities	<ul style="list-style-type: none"> ▪ ovarian cancer (primary) ▪ rectal cancer (secondary) ▪ hypertension ▪ arthritis
Providers / Institutions	<p>Dr P: primary care provider Dr X: rural general surgeon, hospitals B and C Dr AA: colorectal surgeon, academic medical center A Dr O: medical oncologist, community infusion center D Mrs N: oncology care coordinator, community infusion center D</p>

Virtual Rural Oncology Community (V-ROC)



PI: Katia Noyes, PhD, MPH

Project Coordinator: Christina Crabtree-Ide, MPH

Co-PI: LS Constine, MD (Radiation Oncology)

Co-PI: D Holub, MD (Family Medicine)

KJT Group: Rebecca Hahn, MPH & Dan Wasserman

- I Rizvi, MD (Community Surgery)
- M Shayne, MD (Medical Oncology)
- Bill and Barb Moore, Patient Stakeholder Experts
- Pat Zampi, Director of VROC Patient Engagement
- Varun Chowdry, MD (Radiation Oncology)
- Alicia Coffin, MS, RN, OCN (Oncology)
- Jules Zysman, MD (Family Medicine)
- Ginger Arcadi (Nurse Manager)
- Livingston County Department of Health

Percent of Respondents that Agree/Strongly Agree

Healthcare providers in Livingston County: feel that adequate resources are available to meet patients' needs for cancer services

0%

Residents and providers in Livingston County: interested in becoming part of regional healthcare quality innovation projects

71%

Healthcare providers in Livingston County: prefer referring their patients to local healthcare partners over urban academic centers for cancer services

29%

Residents in Livingston County: trust local healthcare practitioners to provide necessary health information

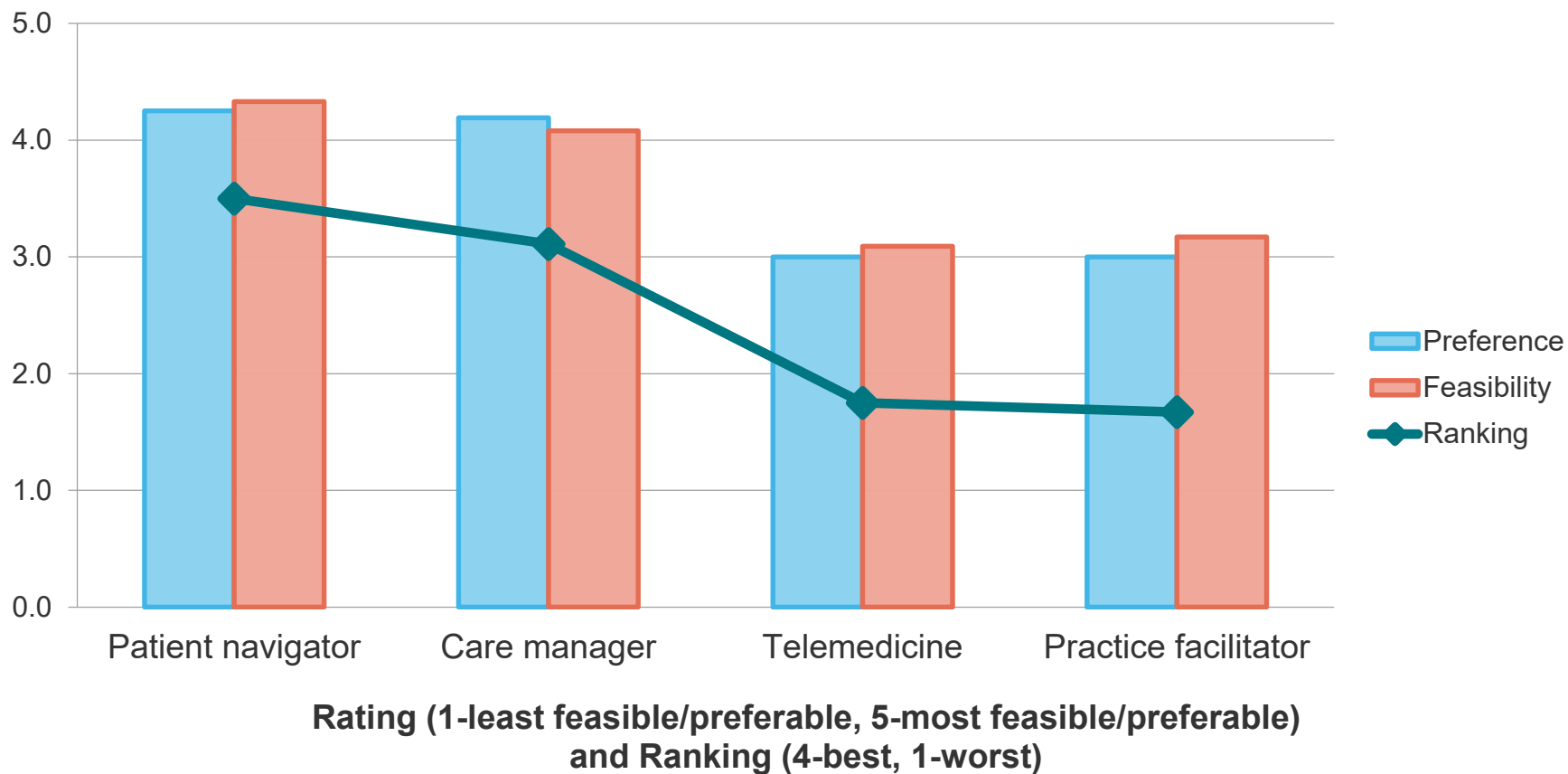
86%

Residents in Livingston County: prefer local healthcare practitioners over urban academic centers to provide necessary cancer services

86%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Average Ratings of Feasibility and Preference



Overcoming fragmented care system and limited local resources

<https://wny.inmycorner.com/Resources>

RESOURCES

Local Support Groups

- [Livingston - 2 Murray Hill Drive, Mt Morris NY 14510 \(800\) 588-8670 or \(585\) 786-8890](#)
- [Erie - Roswell Park Support Groups](#)
- [Allegany & Cattaraugus Counties - Cancer Services Program of Allegany & Cattaraugus Counties, 24 Water Street Room 201, Cuba NY 14727 \(866\) 442-2262 or \(585\) 593-4839](#)
- [Monroe - Cancer Services Program of Monroe County, 46 Prince Street, Rochester NY 14607 \(585\) 244-3070](#)
- [Ontario, Seneca & Yates Counties - Cancer Services Program of Ontario, Seneca & Yates Counties \(315\) 462-0602](#)
- [Steuben - Cancer Services Program of Steuben County, 411 Canisteo Street, Hornell NY 14843 \(877\) 778-6857 or \(607\) 324-8812](#)
- [Livingston - County Support Groups](#)
- [Livingston - Bereavement Support Group](#)
- [WNY - Local Support Groups](#)
- [Genesee - Genesee County Support Groups](#)

Cancer Care Tools

- [Erie - Roswell Park Cancer Information Service](#)

*It took me **TWO HOURS** to get here!*

Recommendations for patients that must **TRAVEL SIGNIFICANT DISTANCES** to receive cancer care

Think of the distance you travel to receive care like your height or weight, it is a **VITAL** part of who you are as a patient. Make sure your treatment team understands the **time and distance** you must travel for treatment!

When your care team is aware of your unique travel requirements, they can:

- Combine appointments when possible
- Provide you with information regarding possible transportation resources in your area

MY CHECKLIST

- Make an appointment to speak with an oncology social worker early in your course of treatment**
 - Be sure to ask your care team about this service, social work is an important part of your care
- If you are employed, understanding your rights as a worker and your employer's health policies is imperative**
 - Talking to your social worker is a good place to start, and your HR representative or a labor law attorney can also help with this
- Explore your local, state, and federal resources and find what programs/services are available in your area**
 - In My Corner
 - Start here on our online portal for information on these and other resources, including local events and resources



MY SUPPORT SYSTEM

Cancer treatment and recovery is a long-term process which can take months or years

- ➔ Your emotional health is an important part of your treatment
 - Seek support from your network of family, friends, house of worship, and others, including emotional and spiritual help when needed
 - Stay connected with family and friends within your community
 - If you are not sure where to start, your care team can assist with a referral
- ➔ Establish a network of family, friends, and others in your community that you can rely on for rides, meals, and other help throughout this process
 - Reach out to trusted family, friends and others in the local community
 - Feel free to disclose as much or as little about your diagnosis as makes you feel comfortable
- ➔ This can be a financially stressful time
 - Explore financial resources that are available to you. Potential resources include:
 - County department of health cancer services programs, state cancer programs, charity or discount programs within area hospitals, Medicaid Cancer Treatment Program (MCTP)

Remember to

Think strategically

MAKE a plan
EDUCATE yourself
SPEAK up
ASK questions

Patients that take an active role in their treatment often have better outcomes

Not sure where to start?

The online portal "**In My Corner**" (inmycorner.com) is a free online service with a dedicated community resource member and expert community medical resources who are ready to assist you.

- Get answers directly from an oncology nurse or a local resource specialist
- Find locally relevant resources
- Connect with other patients like you



V-ROC: Findings

Role of social determinants of health

Lack of adequate non-medical services

Regional variation

Team-based care delivery: perception vs. reality

CONCLUSIONS:

Lessons learned from healthcare delivery research on special populations

Socio-economic barriers have significant impact on access to quality care and health outcomes.

But the specific barriers vary by location, race/ethnicity, education, gender, income.

Solutions to access barriers must be multi-level.

Changing behavior of one stakeholder group requires a corresponding change in the system.

Implementation of a new intervention is an intervention of itself.

Success of new intervention depends on effective teamwork and right conditions.



Katia Noyes, PhD, MPH

enoyes@buffalo.edu

716.829.5386

Farber Hall 270C



NCI R21: Problem Solving Skills Training in Adult Cancer Survivors: **Bright IDEAS-AC**

MPIs



Katia Noyes, PhD, MPH
University at Buffalo/
Roswell Park

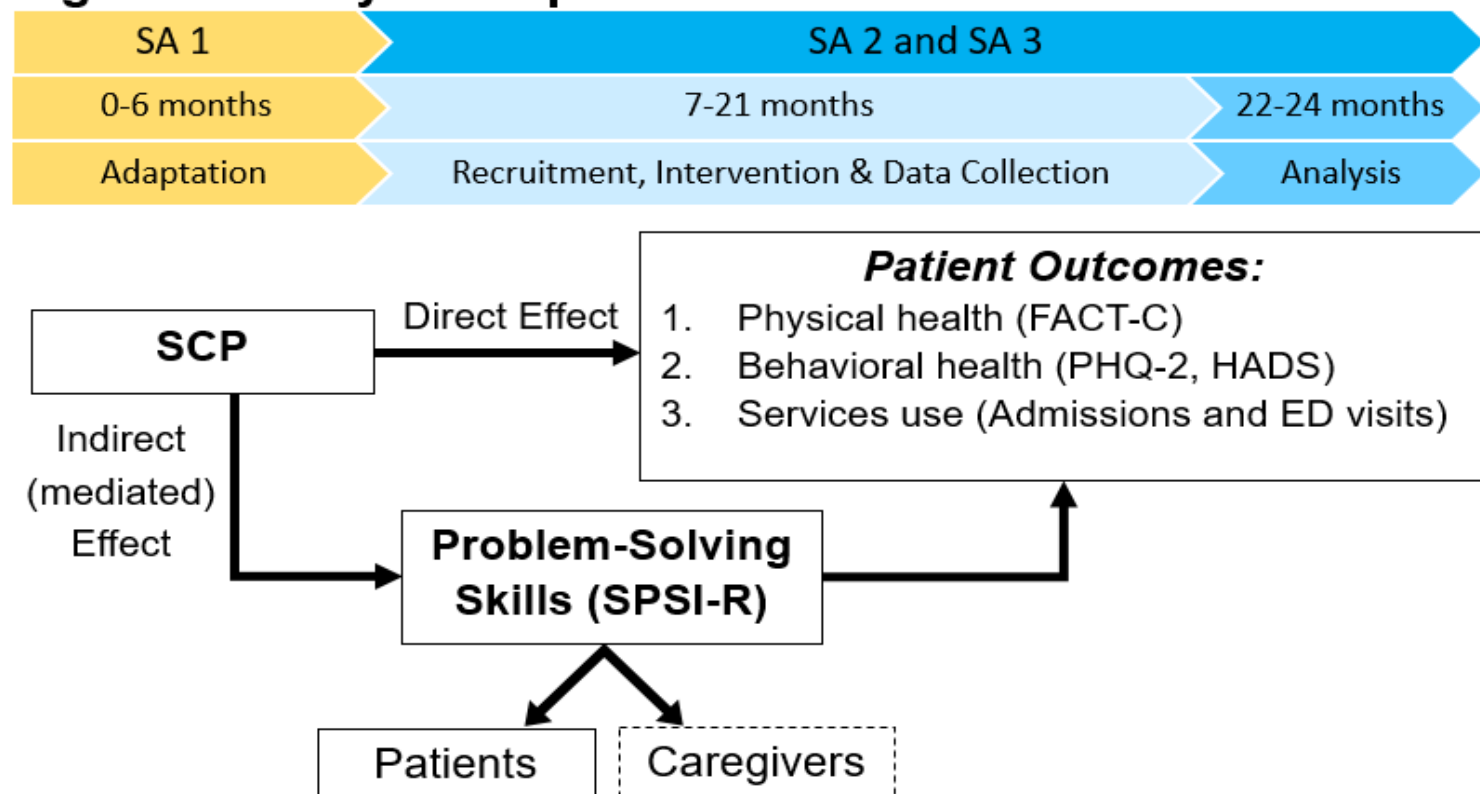


Olle Jane Z. Sahler, MD
University of Rochester
Medical Center

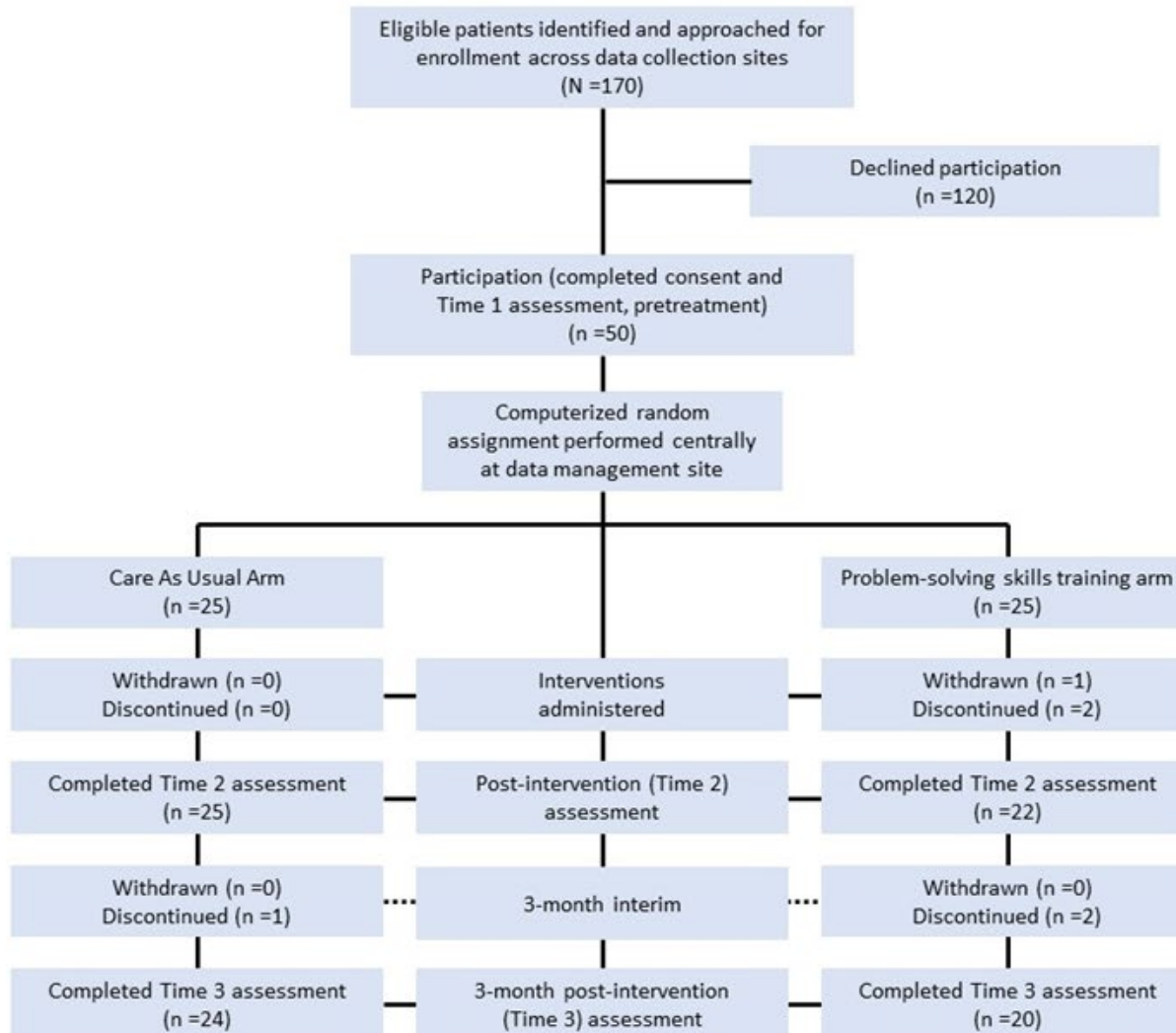


Problem Solving Skills Training in Adult Cancer Survivors

Figure 2. Study conceptual model



CONSORT diagram

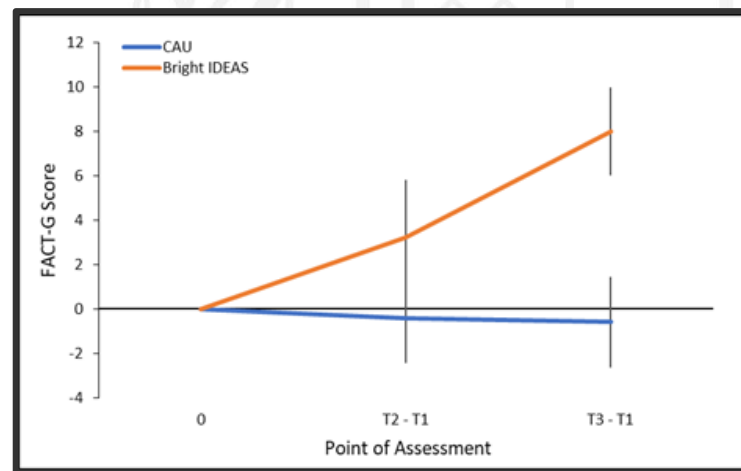
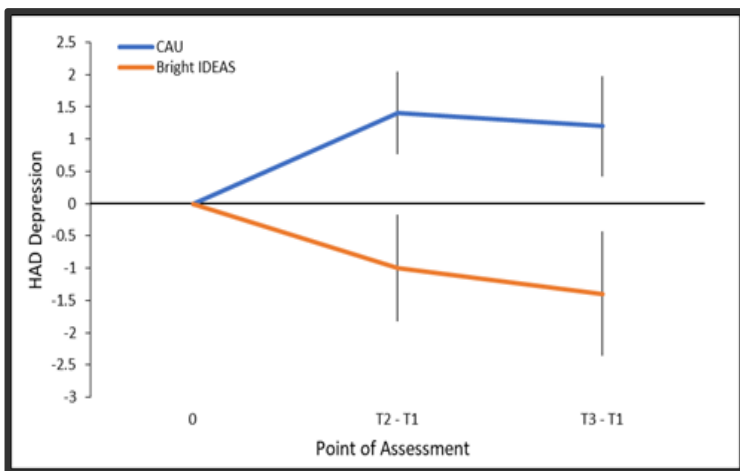
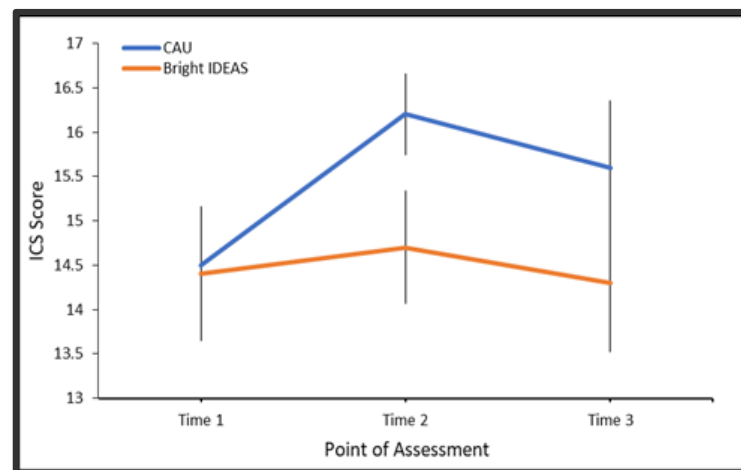
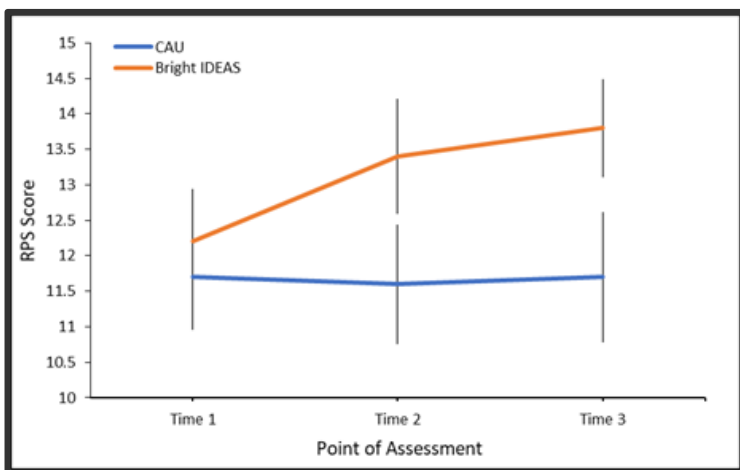


Patient characteristics

	N	Care as Usual n (%)	Bright IDEAS n (%)	p-value
Total				
	50	25 (50.0%)	25 (50.0%)	
Patient Age				
Mean (SD)*	50	63.8 (9.4)	62.3 (8.4)	0.55
4: 40-49	4	2 (8.0%)	2 (8.0%)	0.904
5: 50-59	12	6 (24.0%)	6 (24.0%)	
6: 60-69	25	13 (52.0%)	12 (48.0%)	
7: 70-79	6	2 (8.0%)	4 (16.0%)	
8: 80+	3	2 (8.0%)	1 (4.0%)	
Gender:				
1: Male	18	9 (36.0%)	9 (36.0%)	1.000
2: Female	32	16 (64.0%)	16 (64.0%)	
Ethnicity:				
1: Hispanic	1	0 (0.0%)	1 (4.0%)	0.368
2: Non-Hispanic	48	24 (96.0%)	24 (96.0%)	
3: Unknown	1	1 (4.0%)	0 (0.0%)	
Race:				
1: African American	4	2 (8.0%)	2 (8.0%)	0.572
2: Asian/Pacific Islander	1	0 (0.0%)	1 (4.0%)	
3: Caucasian	44	22 (88.0%)	22 (88.0%)	
4: Mixed	1	1 (4.0%)	0 (0.0%)	
Marital Status				
1: Single	2	0 (0.0%)	2 (8.0%)	0.503
2: Married	33	18 (72.0%)	15 (60.0%)	
3: Divorced	13	6 (24.0%)	7 (28.0%)	
6: Other	2	1 (4.0%)	1 (4.0%)	

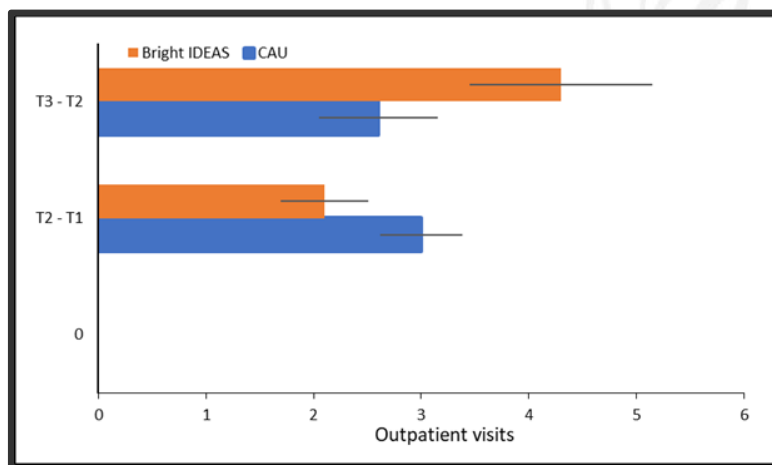
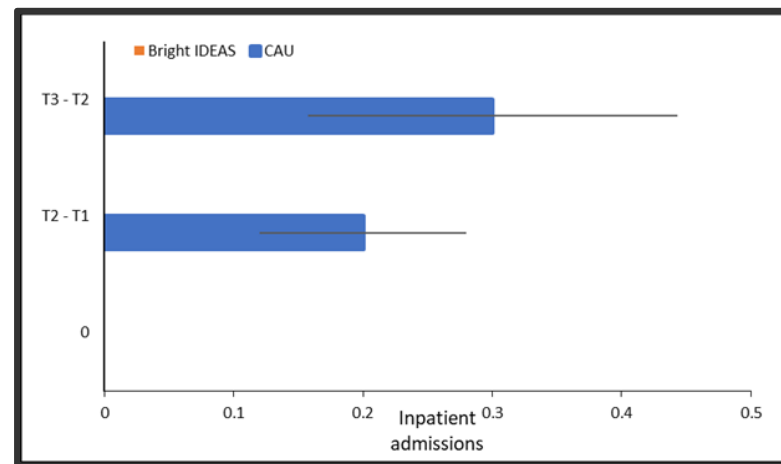
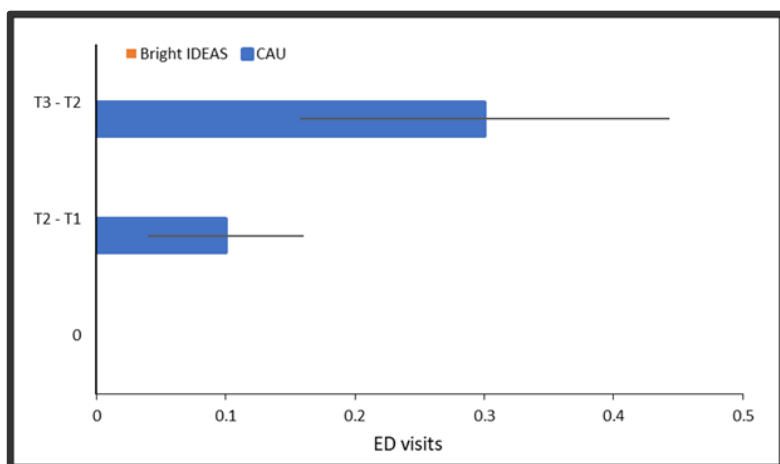
Outcome measures at T1 (prerandomization), T2 (immediately postintervention) and T3 (6 months postrandomization)

Mean + SE. Rational Problem Solving (RPS), Impulsivity/Carelessness Style (ICS), Hospital Anxiety and Depression Scale (HADS), and Functional Assessment of Cancer Therapy- General (FACT-G).



Health services utilization, by type, between T1 and T2 (first 3 months) and T2 and T3 (month 3-6)

Mean + SE. Note that patients in the Bright IDEAS arm reported no ED visits or hospital inpatient admissions.



The pilot study demonstrated that

- Adult cancer survivors can achieve meaningful improvements in problem-solving skills, distress and quality of life after ***eight weekly remote therapy*** sessions.
- Bright IDEAS patients also reported lower use of unplanned inpatient services compared to CAU patients.
- The improvements were sustained 3 months after the therapy.
- The post-study qualitative audit demonstrated that the subjects and their SOs were able and willing to use Bright IDEAS-AC techniques after the study end and found them generally helpful in many aspects of their lives.