

**Advanced Practice Provider**  
Tailoring Care for the Evolving Needs of Cancer Survivors  
September 18

**Sound Check**  
03:55

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04:00

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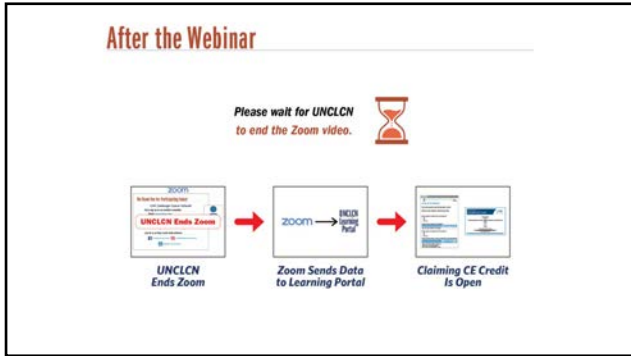
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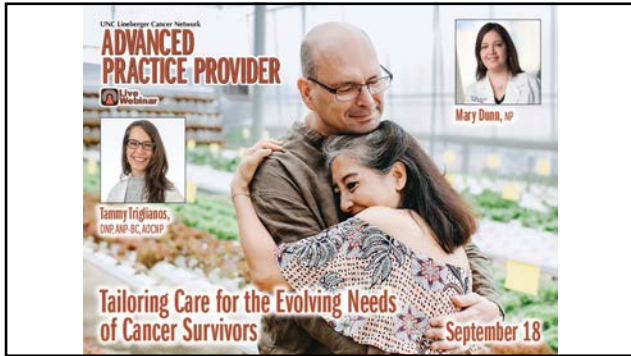
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**Our Presenter**



**Mary Dunn,**  
MSN, RN, OCN, NP-C

Mary Dunn, MSN, RN, OCN, NP-C, is an Adult Nurse Practitioner at the University of North Carolina at Chapel Hill. She earned her BSN from the University of Virginia in 2004 and her MSN from Duke University in 2009.

She joined the GU Oncology program at UNC in 2010 and has a multidisciplinary role working in both the Department of Urology and Division of Oncology providing comprehensive care to patients with genitourinary malignancies.

Mary is the director of the Testicular Cancer Survivorship Clinic and the Co-Director of the von Hippel Lindau Comprehensive Clinical Care Center. She helped form the NC Triangle Chapter of the Bladder Cancer Advocacy Network (BCAN), where she serves as secretary and helps plan the annual local Walk to End Bladder Cancer along with many other patient outreach initiatives.

Her clinical interests lie in survivorship and palliative care.

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**Our Presenter**

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- 4. Mary Dunn, MSN, RN, OCN, NP-C, is the director of the UNC Testicular Cancer Survivorship Program, and she works on several survivorship-focused committees throughout the cancer hospital
- 3. She helped to establish and continues to co-direct the UNC VHL Clinical Care Center

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- 2. Mary was awarded the 2022 APP of the Year by the American Urological Association

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2. Mary was awarded the 2022 APP of the Year by the American Urological Association
1. She is also a founding member and the current President of the NC Triangle Chapter of the Bladder Cancer Advocacy Network

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**Our Presenter**



**Tammy Triglianos, DNP, NP-BC, AOCNP**  
 DNP, NP-BC, AOCNP

Tammy Triglianos, DNP, NP-BC, AOCNP, is an Adult Oncology Nurse Practitioner at the UNC Lineberger Comprehensive Cancer Center and an Assistant Professor at the UNC School of Nursing. She received her Master's in Nursing from Columbia University and her Doctorate in Nursing Practice from UNC.

Her clinical focus is on gastrointestinal medical oncology and she established an Undiagnosed Cancer clinic. She is involved with quality improvement, speaks locally and nationally, serves on the Education Committee of APOG0, and is a member of the ASCO APP Task Force.

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**Our Presenter**

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**Our Presenter**

4. Tammy Triglianos, DNP, ANP-BC, AOCNP, is an Adult Oncology Nurse Practitioner practicing in oncology for over 25 years, with the last 17 at UNC

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**Our Presenter**

4. Tammy Triglianos, DNP ANP-BC, AOCNP, is an Adult Oncology Nurse Practitioner practicing in oncology for over 25 years, with the last 17 at UNC
3. She is a clinical assistant professor at the UNC School of Nursing
2. Tammy received her MSN from Columbia University, and her DNP from UNC
1. In collaboration with UNCLCN, she created and coordinates the Advanced Practice Provider webinar series

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**Sample Poll Everywhere Question**

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**ACCME Disclosure**

This activity has been planned and implemented under the sole supervision of the Course Director, Stephanie Wheeler, PhD, MPH, in association with the UNC Office of Continuing Professional Development (CPD). The course director received research support from AstraZeneca (ended June 2023) and Pfizer Medical Foundation (ended December 2023). These financial relationships have been mitigated. CPD staff have no relevant financial relationships with ineligible companies as defined by the ACCME.

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**ANCC Disclosure**

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A person is considered a cancer survivor from the time of diagnosis through the balance of life. There are many types of survivors, including those living with cancer and those free of cancer.

True  0%

False  0%

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**TAILORING CARE OF THE EVOLVING NEEDS OF CANCER SURVIVORS**

Mary Dunn, NP – [mwdunn@med.unc.edu](mailto:mwdunn@med.unc.edu)  
 Tammy Trigilianos DNP, ANP-BC, AOCNP – [ttrig@med.unc.edu](mailto:ttrig@med.unc.edu)

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### Objectives

- Describe the complex needs throughout cancer survivorship
- Identify key strategies for tailoring cancer survivorship care to address individual patient needs
- Discuss the role of interdisciplinary collaboration and patient-centered care in providing comprehensive supportive services for cancer survivors throughout their lifespan

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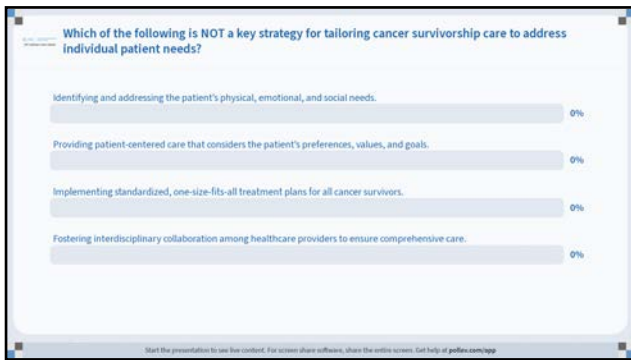
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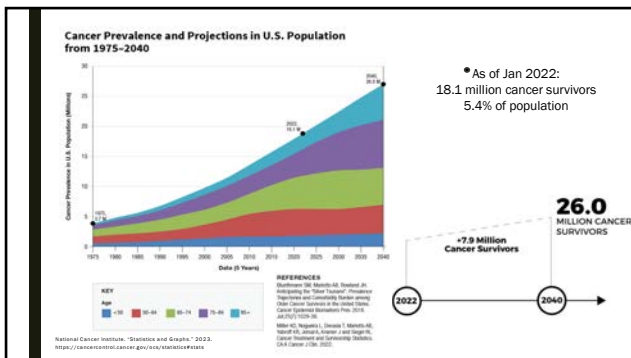
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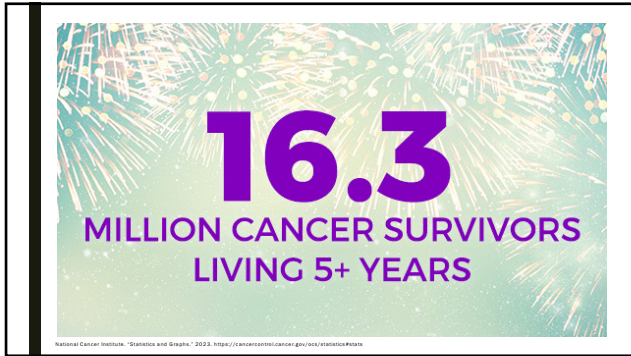
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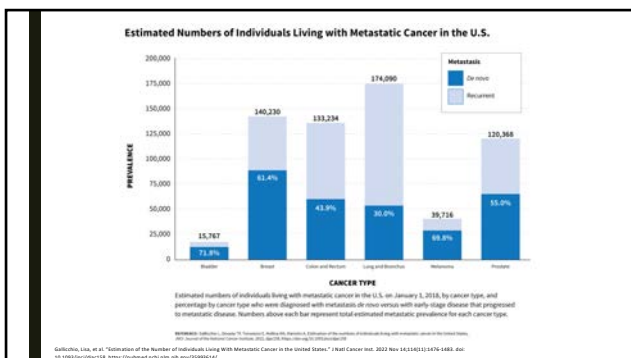
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**67%**  
OF SURVIVORS ARE 65 OR OLDER

It is estimated that by 2040, 74% of cancer survivors in the United States will be age 65 or older.<sup>1</sup>

National Cancer Institute, "Statistics and Graphs," 2023. <https://can.cancer.gov/statistics-and-graphs>

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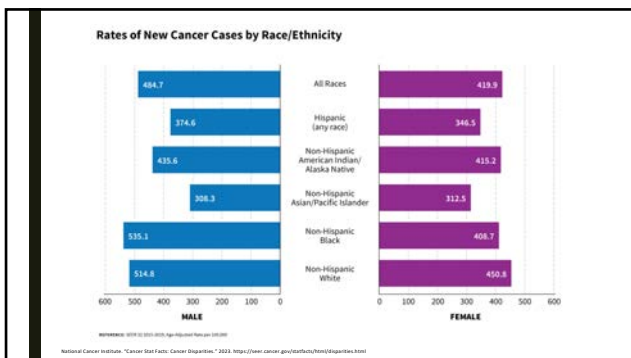
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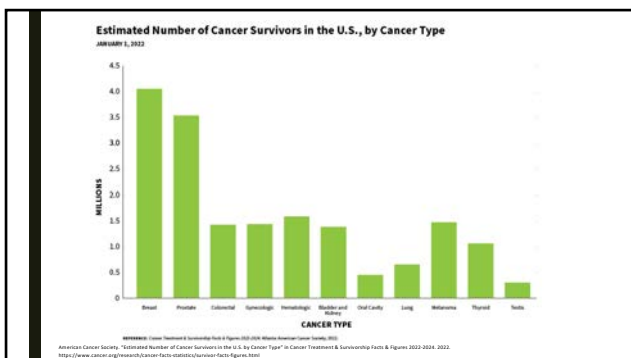
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### Survivorship ...life after a cancer diagnosis

- Is different for everyone
- Begins at diagnosis and includes people who are on long-term treatment or those who have completed treatment
- Includes:
  - surveillance and prevention of recurrence
  - surveillance of medical or psychological effects of cancer
  - intervention for late or long-term effects of cancer and/or treatment
  - health promotion and quality of life

Mullin, M. A., McWhorter, S., Tanczos, E., et al. Developing national cancer survivorship standards to inform quality of care in the United States using a consensus approach. J Cancer Surviv 18, 1330–1339 (2024). <https://doi.org/10.1007/s11764-024-01800-6>

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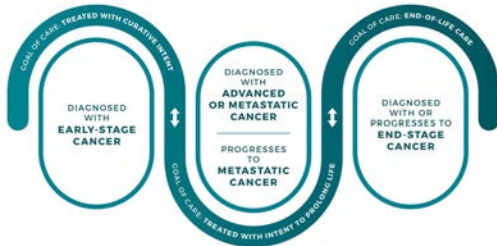
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### Phases of Cancer Survivorship



Office of Cancer Survivorship, "Survivorship Terms." <https://cancercontrol.cancer.gov/occs/definitions>

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78 yo Hispanic woman

Social Hx: Lives alone, with her 2 dogs. Works as a part-time house cleaner.

PMH:  
HTN  
DM  
GERD

Initial Presentation:  
+Cologuard, scheduled for colonoscopy in 2020. Delayed due to COVID until 2022. Iron-deficiency anemia.

Diagnosis:  
Stage IIIA (T2N1M0) MSI-High (sporadic origin) colon adenocarcinoma

Cancer Treatment Course:  
s/p right partial colectomy, s/p adjuvant chemotherapy x 6 months

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## Survivorship

### ...life after a cancer diagnosis

- Is different for everyone
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  - **surveillance and prevention of recurrence**
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## Surveillance and Prevention of Recurrence Survivorship Guidelines

<b>American Cancer Society's Survivorship Care Guidelines</b> Find detailed recommendations about nutrition and physical activity, cancer testing, management of side effects, and identification of care.	<b>American Society of Clinical Oncology (ASCO) Clinical Practice Follow-Up Guidelines</b> Learn about ASCO's practice recommendations for specific areas of cancer.	<b>MD Anderson Cancer Center</b> Get information about follow-up procedures used to monitor cancer survivors. Cancer Center guidelines are discussed for 13 different disease sites.
<b>National Comprehensive Cancer Network (NCCN) Guidelines for Survivorship</b> The NCCN survivorship guidelines focus on eight common types of cancer diagnosis and treatment, and include a sample assessment tool. NCCN is an alliance of 23 cancer centers around the country.	<b>Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers</b> The Children's Oncology Group Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers (COG LTFU) Guidelines are a resource for healthcare professionals who provide ongoing care to survivors of pediatric malignancies.	<b>Additional information</b> Additional information regarding guidelines for follow-up care.

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## Surveillance and Prevention cont.

National Comprehensive Cancer Network  
**NCCN Guidelines Version 4.2023**  
**Colon Cancer**

[NCCN Guidelines Index](#)  
[Table of Contents](#)  
[Discussion](#)

PATHOLOGIC STAGE	SURVEILLANCE <sup>a</sup>
Stage I	Colonoscopy <sup>a</sup> at 1 y after surgery • If advanced adenoma, repeat in 1 y • If no advanced adenoma, <sup>b</sup> repeat in 3 y, then every 5 y <sup>a,b</sup> • History and physical examination every 3–6 mo for 2 y, then every 6 mo for a total of 5 y • CEA <sup>c</sup> every 3–6 mo for 2 y, then every 6 mo for a total of 5 y • Chest/abdominal/pelvic CT every 6–12 mo (category 2B for frequency <12 mo) from date of surgery for a total of 5 y • Colonoscopy <sup>a</sup> in 1 y after surgery except if no preoperative colonoscopy due to obstructing lesion, colonoscopy in 3–6 mo • If advanced adenoma, repeat in 1 y • If no advanced adenoma, <sup>b</sup> repeat in 3 y, then every 5 y <sup>a,b</sup> • PET/CT scan is not indicated • Principles of Survivorship (COL-H)
Stage II, III <sup>a</sup>	Serial CEA elevation or documented recurrence → Workup and treatment (COL-9)

National Comprehensive Cancer Network. "NCCN Guidelines Version 4.2023 Colon Cancer." 2023. [https://www.nccn.org/guidelines/html/col/4\\_2023](https://www.nccn.org/guidelines/html/col/4_2023)

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**Surveillance and Prevention Cont.**

**TABLE 1. Surveillance Guidelines for Colorectal Cancer Recurrence and Screening and Early Detection of Second Primary Cancers (Stage I-IV)**

**ASBESTOS LEVELS OF EVIDENCE AND GRADE**

**1-2 Year postoperative**

- CEA every 3-6 mo if patient is a potential candidate for further treatment
- Chest/abdominal/pelvic CT every 12 mo (stage I-II) or at high risk for recurrence and stage III
- Colonoscopy in year 1 if advanced adenoma, repeat in 3 years; if not, repeat in 5 years

**3-5 Year postoperative**

- CEA every 6 mo if patient is a potential candidate for further treatment
- Chest/abdominal/pelvic CT every 12 mo (stage I-II) or at high risk for recurrence and stage III
- Colonoscopy in year 4, if no advanced adenoma, repeat every 3 y

**(3) Year postoperative**

- CEA not recommended
- Chest/abdominal/pelvic CT not recommended
- Colonoscopy every 3 y starting 3 y after resection for advanced adenoma
- Proctoscopy (total colon only) not recommended

**NOT recommended**

- Routine blood test (eg, CBC, liver function test)
- Abx 1 y, repeat CEA monitoring
- Abx 3 y, routine CT scans
- Routine use of PET/CT at any stage
- PET scans are not considered an acceptable substitution for CT scans

**Optimal timing unknown**

- Screen patients for breast, uterine, and prostate cancers as appropriate according to American Cancer Society guidelines

**A breast and/or uterine only screen or prostate MRI is not according to high-risk screening guidelines.**

**UNC releases complete clinical chart, CEA, immunohistochemistry, CT, colonoscopy, AFP, fecal occult blood test, and/or other appropriate laboratory tests to patients under appropriate conditions. The National Comprehensive Cancer Network (NCCN) cautions that the information is copyright based on their intellectual property and permission from the National Cancer Institute to develop NCCN Guidelines for Cancer Care. It is not to be reprinted or used in any form for any purpose without the written permission of the NCCN. To view the most current and complete version of the NCCN Guidelines go to [www.nccn.org](http://www.nccn.org). NCCN Guidelines are available in Spanish, Chinese, and other languages. All trademarks are the property of their respective owners. © 2024 NCCN. All rights reserved. This document is copyrighted by the National Comprehensive Cancer Network, Inc.**

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**Survivorship**  
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  - health promotion and quality of life

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**Medical or Psychological Effects**

Schmitt ME, Goffinet AM, Harman S, Stauder C. Late effects, long-term problems and unmet needs of cancer survivors. Int J Cancer. 2022;151(8):1240-1246. doi:10.1002/ijc.34132. https://doi.org/10.1002/ijc.34132

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**Survivorship: Anxiety, Depression, Distress**

- Survivors of cancer are at elevated risk for mental health issues
- Fear of cancer recurrence or progression (unmet need)
  - Associated with:
    - impaired quality of life or psychosocial adjustment
    - elevated emotional distress
    - range of physical symptoms
    - scanxiety
- Early recognition, support, validation of feelings, referrals psychosocial support

Article: Fear of Cancer Recurrence or Progression: What Is It and What Can We Do About It? (2022)

Regehr, Catherine David, et al. "Fear of Cancer Recurrence or Progression: What Is It and What Can We Do About It?" *Am Soc Clin Oncol Educ Book*. 2022 Apr;42:10-16. doi: 10.1200/JCO.2019.00010. PMID: 35484816; pmid=35484816." <https://pubmed.ncbi.nlm.nih.gov/35484816/>

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**Cancer-Related Anxiety**

- Do not ignore fears
- Recognize emotions
- Support group
- Healthy choices: diet, exercise, avoid unhealthy behaviors
- Reduce/manage stress: family/friends, hobbies, walk, meditate
- Well informed
- Adhere to follow-up care plan

National Cancer Institute. "Helping Cancer Survivors Cope with Cancer-Related Anxiety and Distress." April 20, 2020. <https://www.cancer.gov/news-events/cancer-currents-blog/2020/cancer-survivors-managing-worries-distress>

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**Medical or Psychological Effects of Cancer**

**General Survivorship Principles**

- Definition of Survivorship (SURV-1)
- Standards for Survivorship Care (SURV-2)
- General Principles of the Survivorship Guidelines (SURV-3)
- Screening for Subsequent New Primary Cancers (SURV-4)
- Principles of Cancer Risk Assessment and Counseling (SURV-5)
- Assessment by Health Care Provider at Regular Intervals (SURV-6)
- Survivorship Assessment (SURV-A)
- Survivorship Resources for Health Care Professionals and Survivors (SURV-B)
- Principles of Screening for Treatment-Related Subsequent Primary Cancers (SURV-C)

**Preventive Health**

- Healthy Lifestyles (HL-1)
- Physical Activity (SPA-1)
- Nutrition and Weight Management (SNWM-1)
- Supplement Use (SSUP-1)
- Immunizations and Infections (SIMIN-1)

**Late Effects/Long-Term Psychosocial and Physical Problems**

- Cardiovascular Disease Risk Assessment (SCVD-1)
- Anthracycline-Induced Cardiac Toxicity (SCARDIO-1)
- Anxiety, Depression, Trauma, and Distress (SANXDE-1)
- Cognitive Function (SCF-1)
- Fatigue (SFAT-1)
- Lymphedema (SLYMPH-1)
- Pain (SPAIN-1)
- Hormone-Related Symptoms (SHRS-1)
- Sexual Health (SSH-1)
- Fertility (SF-1)
- Sleep Disorders (SSD-1)
- Employment and Return to Work (SWORK-1)

© 2024 UNC Lineberger Cancer Network  
Survivorship - 2024  
https://www.unc.org/general-principles-2024/ncgpr-16-01-1464

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**73 yo White man**

**Social Hx:** Married, lives with his wife, 2 sons.

**PMH:**  
Type II DM, insulin depend.  
A-fib (Eliquis, Sotalol)  
Hypothyroid  
CHF  
CKD

**Initial Presentation 2010:** c/o change in appetite and weight loss ~30lbs over 6-months. PCP referred him for colonoscopy.

**Diagnosis:** Stage IV colon cancer with liver metastases, MSS, KRAS wildtype

**Cancer Treatment Course:**  
Multiple lines of systemic therapy, colon and hepatic resection, ablation

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**Chronic disease management before and during cancer treatment may improve cancer outcomes.**

True  0%

False  0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pdfmc.com/help

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### Cancer and other Chronic Diseases

- Chronic disease management before and during cancer treatment may improve cancer outcomes and lower all-cause mortality
- Individuals with chronic illness often do not receive standard cancer treatments as often as those without chronic illness
  - including chemotherapy, radiation, surgery
  - lower completion rates

Chen, Sun. "A system-based approach to cancer care and equity must include excellent chronic disease management." ASCO Daily News. 2024. August 8. <https://doi.org/10.1200/JCO.2024.08.10000>

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### Cancer and other Chronic Diseases

A 3-Pronged Approach to Chronic Disease Management During Cancer Treatment and Survivorship

During diagnosis	During treatment	After treatment
Use cancer workups and oncology referral orders to trigger warnings that include best practice alerts, quality measurement, or other overt reminders that suggest chronic care management must remain a priority.	Patients with chronic illnesses undergoing cancer treatment should be deemed high risk and closely monitored for any negative impacts of cancer treatment on their chronic illnesses. Responsibility for chronic disease management and control must be clearly defined and the care communication loop between specialty and chronic care must be timely and closed.	Cardiovascular risk compromises the life expectancy of cancer survivors. Patients with ≥ 10% 10-year risk of myocardial infarction, stroke, or death should be treated with aggressive hypertension control and statins. All patients should be advised about and supported to achieve a Mediterranean-like diet, smoking cessation, and a tailored exercise program.

Chen, Sun. "A system-based approach to cancer care and equity must include excellent chronic disease management." ASCO Daily News. 2024. August 8. <https://doi.org/10.1200/JCO.2024.08.10000>

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### Fatigue in Survivorship

Definition:  
Cancer-related fatigue is a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning. (NCCN Guidelines v 1.2020)

- One of the most common and most distressing symptom

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### Fatigue in Survivorship cont.

Prevalence

- Almost 50% of cancer survivors (short and long-term survivorship)
- 62-85% on active treatment
- Under-reported, underdiagnosed, and undertreated
- 80% felt something could not be done

FALL, A. et al. "Cancer-related Fatigue: ESMO Clinical Practice Guidelines for Diagnosis and Treatment." Ann Oncol. 2020 Jun;31(6):713-723. doi: 10.1093/annonc/mdz620.02.016. Epub 2020 Mar 13. <https://doi.org/10.1093/annonc/mdz620.02.016>

Thong, M. et al. "Cancer-Related Fatigue: Causes and Current Treatment Options." Curr Treat Options Oncol. 2009 Feb 2;10(2):17-30. doi: 10.1007/s11864-009-0197-5. <https://pubmed.ncbi.nlm.nih.gov/19208492/>

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### Physical Activity

- Exercise is safe and helpful
- Can improve quality of life, cope with side effects of treatment
- Possibly decrease risk of new cancers in the future
- Avoid inactivity




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### How regular exercise may help you before, during, and after cancer treatment

- Help your body and brain work better
- Reduce feeling tired (fatigue)
- Help lessen depression and anxiety
- Might help you sleep better
- Keep or improve your physical ability to get things done
- Improve your muscle strength, bone health and range of motion
- Strengthen your immune system
- Increase your appetite
- Help you get to and maintain a healthy weight
- May help with [breast cancer-related lymphedema](#) (and does not increase risk)
- Decrease the chance that some types of cancer will come back
- Improve your quality of life
- Reduce treatment side effects

American Cancer Society. "Physical Activity and the Patient with Cancer." Last Revised: March 16, 2022. <https://www.cancer.org/cancer/survivorship/for-healthy-after-treatment/physical-activity-and-the-cancer-patient.html>

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### Physical Activity Resources

- ACSM: Moving Through Cancer
- Livestrong (YMCA)
- Maple Tree Cancer Alliance
- App: Cancer Exercise
- Cancer Rehabilitation Programs

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### Effects of Exercise on Health-Related Outcomes in Those with Cancer

Outcome	Aerobic Only	Resistance Only	Combination (Aerobic + Resistance)
<b>Strong Evidence</b>	<b>Dose</b>	<b>Dose</b>	<b>Dose</b>
<b>Cancer-related fatigue</b>	2x/week for 30-60 min per session of moderate intensity	2x/week of 2 sets of 10-15 reps for major muscle groups at moderate intensity	2x/week for 30-60 min per session of moderate aerobic exercise plus 2x/week of resistance training 2 sets of 12-15 reps for major muscle groups at moderate intensity
<b>Health-related quality of life</b>	3-5x/week for 30-60 min per session of moderate to vigorous	2x/week of 2 sets of 8-12 reps for major muscle groups at moderate to vigorous intensity	2-3x/week for 30-60 min per session of moderate aerobic exercise plus 2x/week of resistance training 2 sets of 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Physical Function</b>	3x/week for 30-60 min per session of moderate to vigorous	2-3x/week of 2 sets of 8-12 reps for major muscle groups at moderate to vigorous intensity	3x/week for 30-60 min per session of moderate to vigorous aerobic exercise plus 2-3x/week of resistance training 2 sets of 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Anxiety</b>	3x/week for 30-60 min per session of moderate to vigorous	Insufficient evidence	2-3x/week for 30-60 min of moderate to vigorous aerobic exercise plus 2x/week of resistance training of 2 sets, 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Depression</b>	3x/week for 30-60 min per session of moderate to vigorous	Insufficient evidence	2-3x/week for 30-60 min of moderate to vigorous aerobic exercise plus 2x/week of resistance training of 2 sets, 8-12 reps for major muscle groups at moderate to vigorous intensity
<b>Lymphedema</b>	Insufficient evidence	2-3x/week of progressive supervised program for major muscle groups does not exacerbate lymphedema	Insufficient evidence

American College of Sports Medicine. "Effects of Exercise on Health-Related Outcomes of Those with Cancer." September 2002. <https://www.acsm.org/docs/default-source/files-for-researchers/cancer/cancer-efg-0202.pdf>

Campbell, Kristin L, et al. "Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable." Medicine & Science in Sports & Exercise 51(11):p 2375-2390, November 2019. | DOI: 10.1249/00000000000002116. [https://journals.lww.com/acsm-mss/Fulltext/2019/11000/Exercise\\_Guidelines\\_for\\_Cancer\\_Survivors\\_\\_23.aspx](https://journals.lww.com/acsm-mss/Fulltext/2019/11000/Exercise_Guidelines_for_Cancer_Survivors__23.aspx)

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### Effects of Exercise on Health-Related Outcomes in Those with Cancer cont.

Moderate Evidence			
<b>Bone health</b>	Insufficient evidence	2-3x/week of moderate to vigorous resistance training plus high impact training sufficient to generate ground reaction force of 3-4 times body weight for at least 10 months	Insufficient evidence
<b>Sleep</b>	3-4x/week for 30-60 min per session of moderate intensity	Insufficient evidence	Insufficient evidence

American College of Sports Medicine. "Effects of Exercise on Health-Related Outcomes of Those with Cancer." September 2002. <https://www.acsm.org/docs/default-source/files-for-researchers/cancer/cancer-efg-0202.pdf>

Campbell, Kristin L, et al. "Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable." Medicine & Science in Sports & Exercise 51(11):p 2375-2390, November 2019. | DOI: 10.1249/00000000000002116. [https://journals.lww.com/acsm-mss/Fulltext/2019/11000/Exercise\\_Guidelines\\_for\\_Cancer\\_Survivors\\_\\_23.aspx](https://journals.lww.com/acsm-mss/Fulltext/2019/11000/Exercise_Guidelines_for_Cancer_Survivors__23.aspx)

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**73 yo Black man**

**Social Hx:** Married, 4 children. Retired. Previously smoked 1 ppd x 20-30 yrs. No alcohol. History of IVDU '60s

**PMH:** Hepatitis C, cured s/p Harvoni HTN Recent: HF with reduced EF

**Initial Presentation:** surveillance for hepatitis C, liver mass, s/p hepatectomy in 2015

**Diagnosis:** 2017 Stage IV Hepatocellular Carcinoma with bone metastases

**Cancer Treatment Course:** liver-directed therapy, systemic therapy w/ immunotherapy + VEGF inhibitor s/p 2 years of immunotherapy

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NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines)  
**Management of Immunotherapy-Related Toxicities**

Chapchal, S, et al. "Management of immune checkpoint blockade systemic toxicities: a collaborative position paper." Ann Oncol. 2016 Apr;27(4):559-74. doi: 10.1093/annonc/mdv423. Epub 2015 Dec 28. <http://academic.oup.com/ann/onk/advance-article-abstract/doi/10.1093/annonc/mdv423/2411562>

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**Key points for GPs and Practice Nurses seeing patients**

- Flag all patients having immunotherapy on patient system to highlight risk of side effects during treatment and for at least 12 months after finishing treatment.
- Patients can present with non-specific symptoms so consider blood tests to rule out biochemical-only changes, such as hepatitis, adrenal insufficiency and thyroid dysfunction.
- Initially mild symptoms such as darkness, breathlessness or headaches can rapidly progress into colitis, pneumonitis or encephalitis.
- Contact hospital advice (oncologist) straightaway if concerned your patient may have immunotherapy side effects - they may carry an immunotherapy alert card with details.
- Refer to UKCIND Oncology/Haematology Treatment Toxicity Risk Assessment Tool regarding side effects (includes immunotherapy).

**Remember - Think possible 'flu' for any patient that is on or has had immunotherapy**

**steroids** (with a red prohibition sign over the word)

Cancer Research UK. "Immunotherapy and its side effects." Last reviewed 25 July 2023. <https://www.cancerresearchuk.org/health-professional/immunotherapy-and-other-post-diagnosis-treatments/immunotherapy-and-its-side-effects>

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### Survivorship ...life after a cancer diagnosis

- Is different for everyone
- Begins at diagnosis and includes people who are on long-term treatment or those who have completed treatment
- Includes:
  - surveillance and prevention of recurrence
  - surveillance of medical or psychological effects of cancer
  - intervention for late or long-term effects of cancer and/or treatment
  - **health promotion and quality of life**

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### Health Promotion and Quality of Life

- Achieve and maintain a healthy weight
- Engage in regular physical activity
- Maintain a healthy diet, i.e. vegetables, fruit and whole grains
- Avoid tobacco
- Avoid or limit alcohol consumption

Rock CL, et al. "American Cancer Society nutrition and physical activity guideline for cancer survivors." *Ca Cancer J Clin.* 2012. <https://doi.org/10.3322/caac.21719>

Engelke C, et al. "Tobacco use and treatment among Cancer Survivors." *International Journal of Environmental Research and Public Health.* 2020. 17(2):9109. <https://doi.org/10.3390/ijerph17291099>

Oh M, et al. "Alcohol Consumption Among Adults with a Cancer Diagnosis in the All of Us Research Program." *JAMA Netw Open.* 2023;6(8):e232828. doi:10.1001/jamanetworkopen.2023.2828. <https://pubmed.ncbi.nlm.nih.gov/41762449/>

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### Survivorship Resources for Patients

- National Coalition for Cancer Survivorship  
<https://canceradvocacy.org>
- American Cancer Society  
<http://www.cancer.org>
- American Society of Clinical Oncology's Cancer.Net  
<https://www.cancer.org/cancer/types.html>
- Cancer and Careers  
[www.cancerandcareers.org](http://www.cancerandcareers.org)
- Get Real and Heel  
<http://getrealandheel.unc.edu>
- Livestrong at the YMCA  
[www.ymca.net/livestrong-at-the-ymca/](http://www.ymca.net/livestrong-at-the-ymca/)

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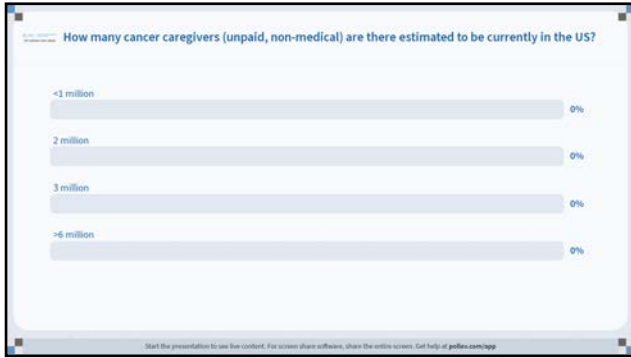
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### Caregivers

- Consider survivors also
- Provide essential support
- Challenges
- Responsibilities
- Life-changing effects
- Cancer Survival Toolbox program (NCCS)
  - Resource for caregivers
  - Audio recordings

National Coalition for Cancer Survivorship. "Caring for the Caregiver: Cancer Survival Toolbox." 2013. <https://cancerinstitute.org/resources/cancer-survival-toolbox/caring-for-the-caregiver/>.  
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### Summary

- Cancer survivorship has complex needs
  - Evolving landscape of cancer treatments
- Aggressive chronic disease management and multidisciplinary care is integral to cancer survivorship plans
- Key strategies:
  - managing side effects of cancer treatments
  - refer to specialists when appropriate, including cancer support services
  - promote healthy lifestyle

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American Cancer Society. "Estimated Number of Cancer Survivors in the U.S. by Cancer Type" in *Cancer Treatment & Survivorship Facts & Figures 2022-2024*. 2022. <https://www.cancer.org/research/cancer-facts-statistics/survivorship-facts-figures.html>

American College of Sports Medicine. "Effects of Exercise on Health-Related Outcomes of Those with Cancer." September 2022. <https://www.acsm.org/docs/default-source/fitness/physical-activity-and-cancer-2022.pdf>

Bergers, Cristiane Deetz, et al. "Fear of Cancer Recurrence or Progression: What Is It and What Can We Do About It?" *Am Soc Clin Oncol Educ Book*. 2022 Apr;42:3-10. doi: 10.1200/JCO.100031. <https://pubmed.ncbi.nlm.nih.gov/35514728/>

Campbell, Kristin L, et al. "Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable." *Medicine & Science in Sports & Exercise* 51(11):p 2375-2390, November 2019. | DOI: 10.1249/MSS.0000000000002116. [https://journals.lww.com/exercise/FullText/2019/11/000/Exercise\\_Guidelines\\_for\\_Cancer\\_Survivors\\_2375.aspx](https://journals.lww.com/exercise/FullText/2019/11/000/Exercise_Guidelines_for_Cancer_Survivors_2375.aspx)

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Melicia, M.A., McWhirter, G., Tomason, E, et al. "Developing national cancer survivorship standards to inform quality of care in the United States using a consensus approach." *J Cancer Surviv* 18, 1190-1199 (2024). <https://doi.org/10.1007/s11764-024-01602-6>

Office of Cancer Survivorship. "Survivorship Terms." <https://cancercontrol.cancer.gov/ocs/definitions> National Cancer Institute. "Cancer Stat Facts: Cancer Disparities." 2023. <https://www.seer.cancer.gov/cancer/25mm/statfacts/html/alldis.html>

National Cancer Institute. "Statistics and Graphs." 2023. <https://cancercontrol.cancer.gov/ocs/statistics>

National Cancer Institute. "Helping Cancer Survivors Cope with Cancer-Related Anxiety and Distress." April 30, 2020. <https://www.cancer.gov/news-events/cancer-currents-and-events/2020/04/helping-cancer-survivors-cope-with-cancer-related-anxiety-and-distress>

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National Comprehensive Cancer Network. "NCCN Guidelines Version 4.2023 Colon Cancer." 2023. [https://www.nccn.org/guidelines/version\\_4.2023/colon\\_cancer/](https://www.nccn.org/guidelines/version_4.2023/colon_cancer/)

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National Comprehensive Cancer Network. "Guidelines in Management of Immunotherapy-Related Toxicities v3.2023." 2024. [https://www.nccn.org/guidelines/guidelines/guidelines\\_detail/irto\\_v3-2024](https://www.nccn.org/guidelines/guidelines/guidelines_detail/irto_v3-2024)

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Thong, M, et al. "Cancer-Related Fatigue: Causes and Current Treatment Options." *Curr Treat Options Oncol*. 2020 Feb 5;21(2):17. doi: 10.1007/s11864-020-0707-5. <https://pubmed.ncbi.nlm.nih.gov/3202929/>

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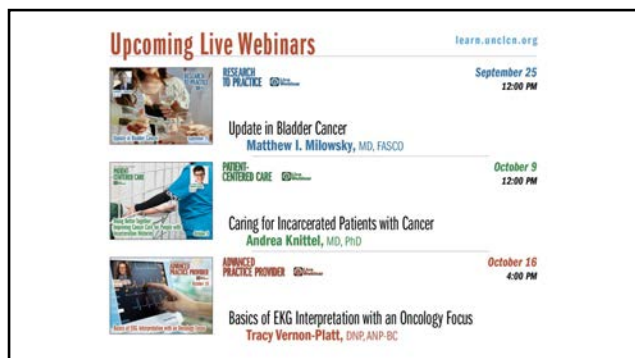
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**Strategies for Managing Toxicities of Oral Oncolytics**  
Kevin Chen, PharmD, MS    Aimee Faso, PharmD, BCOP, CPP  
Blanka Patel, PharmD, BCOP, CPP

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