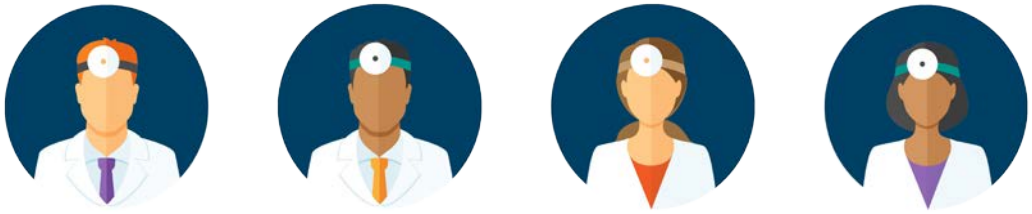

AMERICAN CANCER SOCIETY PROSTATE CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY

Assessment and Management of Long-term and Late Effects

SEXUAL FUNCTION AND INTIMACY

- Discuss sexual function
- Use validated tools to monitor erectile function over time
- Erectile dysfunction (U) may be addressed through a variety of options, including penile rehabilitation or prescription of phosphodiesterase type 5 inhibitors (e.g., sildenafil, vardenafil, tadalafil)
- Refer men with persistent sexual dysfunction (U) to a urologist, sexual health specialist, or psychotherapist to review treatment and counseling options
- Encourage couples to discuss sexual intimacy and refer to counseling or support services as appropriate
- Instruct couples on use of sexual aids to improve erectile dysfunction (U) for men/male partners and for postmenopausal symptoms in female partners
- Refer to mental health professional with expertise in sex therapy

URINARY FUNCTION

- Discuss urinary function (e.g. decreased bladder capacity (U), dribbling (U), dysuria (U), fistula (U), frequency (U), hematuria (U), hesitancy (U), nocturia (U), overactive bladder (U), radiation induced cystitis (U), slowing of stream (U), urethral stricture (U), urgency (U), incontinence (U), retention (U))
- Consider timed voiding, prescribing anticholinergic medications (e.g. oxybutynin) to address issues such as nocturia (U), frequency (U) or urgency (U)
- Consider alpha-blockers (e.g. tamsulosin) for slow stream (U)
- Refer survivors with post-prostatectomy incontinence (U) to a physical therapist for pelvic floor rehabilitation; at a minimum, instruct survivors about Kegel exercises
- Refer men with persistent leakage (U) or other urinary symptoms to a urologist for further evaluation (e.g. urodynamic testing, cystoscopy) and discussion of treatment options including surgical placement of a male urethral sling or artificial urinary sphincter for incontinence

ANEMIA AND VASOMOTOR FUNCTION (SPECIFIC RISK FOR MEN RECEIVING ADT)

- Discuss hot flushes/sweats (M)
- Although not approved by the FDA for this indication, prescription of selective serotonin or noradrenergic reuptake inhibitors or gabapentin may offer symptom relief
- Assess for anemia (U), perform annual CBC to monitor hemoglobin levels

BOWEL FUNCTION

- Discuss bowel function and symptoms (e.g. rectal bleeding (U))
- For men with a negative colorectal cancer screening result experiencing rectal bleeding (U), prescribe stool softeners, topical steroids or anti-inflammatories
- Refer survivors with persistent rectal symptoms (e.g. bleeding (U), sphincter dysfunction (U), rectal urgency (U) and frequency (U)) to the appropriate specialist

CARDIOVASCULAR AND METABOLIC FUNCTION (SPECIFIC RISK FOR MEN RECEIVING ADT)

- Follow U.S. Preventive Services Task Force guidelines for evaluation and screening for cardiovascular (U) risk factors, blood pressure monitoring, lipid profiles and serum glucose (possible increased risk of myocardial infarction)
- Assess for body hair loss (U), muscle wasting (U), diabetes (U), dry eyes (U), excessive emotional reactions/frequent mood changes (U), gynecomastia (U), high cholesterol (U), metabolic syndrome (U), subcutaneous fat accumulation (U), venous thromboembolism (U), vertigo (U), weight gain/abdominal obesity/increased fat mass (U)

DISTRESS, DEPRESSION, PSA ANXIETY

- Assess for distress (M), depression (L) and PSA anxiety (U) at least annually using a simple screening tool, such as the Distress Thermometer
- Manage distress/depression using in-office counseling resources or pharmacotherapy as appropriate
- Refer survivors experiencing distress/depression for further evaluation

FRACTURE RISK/OSTEOPOROSIS

- Assess risk of fracture for men treated with ADT (U) or older radiation techniques (H) through baseline DEXA scan and calculation of a FRAX score
- For men determined to be high risk (U), prescribe weekly bisphosphonate therapy (oral alendronate at a dose of 70 mg) or annual intravenous zoledronic acid at a dose of 5 mg to increase bone density
- Denosumab is also approved by the FDA to treat men at increased risk of osteoporosis

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

AMERICAN CANCER SOCIETY PROSTATE CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY (CONTINUED)

OTHER CONSIDERATIONS

- Fear of recurrence
- Pain-related concerns
- End-of-life concerns: death and dying
- Changes in sexual function and/or desire

More psychosocial effects (U):

- Challenges with body image (secondary to surgery and/or hormonal therapy)
- Challenges with self-image
- Relationship and other social role difficulties
- Return to work concerns and financial challenges

HEALTH PROMOTION

- Assess information needs related to prostate cancer and its treatment, side effects, other health concerns and available support services and provide or refer to appropriate resources to meet these needs
- Counsel survivors to achieve and maintain a healthy weight; weight management is considered a priority standard of care
- Counsel survivors to engage in regular physical activity including:
  - Aerobic exercise at least 150 minutes per week
  - Strength training exercise at least 2 days per week
- Counsel survivors to achieve a dietary pattern that is high in vegetables, fruits and whole grains
- Consume a diet emphasizing micronutrient-rich and phytochemical-rich vegetables and fruits, low amounts of saturated fat, intake of at least 600 IU of vitamin D per day and consuming adequate, but not excessive, amounts of dietary sources of calcium (not to exceed 1200 mg/day)
- Refer survivors with nutrition-related challenges (e.g. bowel problems that impact nutrient absorption (U) to a registered dietician
- Assess for tobacco use and offer and/or refer survivors to cessation counseling and resources and counsel survivors to avoid tobacco products
- Counsel survivors to avoid or limit alcohol consumption to no more than 2 drinks per day

SURVEILLANCE AND SCREENING

- Measure serum PSA level every 6-12 months for the first 5 years, then annually thereafter
- Refer survivors with elevated or rising PSA level back to primary treating specialist for further follow-up and treatment
- Perform annual DRE in coordination with cancer specialist to avoid duplication
- Adhere to American Cancer Society screening and early detection guidelines
- Prostate cancer survivors having undergone radiation therapy may have slightly higher risk of bladder and colorectal cancers and may need to follow screening guidelines for higher-risk individuals, if available
- Perform thorough evaluation to rule out bladder cancer, including urologist referral for cystoscopy for survivors with hematuria
- Refer survivors with persistent rectal bleeding, pain or other symptoms of unknown origin to appropriate specialist as well as treating radiation oncologist to conduct a thorough evaluation for rectal cancer

CARE COORDINATION

- Consult with cancer treatment team and request a treatment summary and survivorship care plan
- Maintain role as general medical care coordinator throughout the spectrum of prostate cancer detection, treatment and aftercare, focusing on preventive care and the management of preexisting comorbid conditions, regularly addressing the patient's overall physical and psychosocial status and those components of survivorship care that are mutually agreed upon with the treating clinicians
- Annually assess for the presence of long-term or late effects of prostate cancer and its treatment using validated tool
- Encourage the inclusion of caregivers, spouses or partners in usual prostate cancer survivorship care
- Refer survivors to appropriate community-based and peer support resources

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

View full-text guideline at bit.ly/ACSPrCa

PROSTATE CANCER SURVIVORSHIP CARE: LONG-TERM AND LATE EFFECTS SUMMARY

Long-term Effects Start during treatment and persist	**Late Effects** Start after treatment ends
Surgery Effects (radical prostatectomy: open, laparoscopic, robotic-assisted)	
Urinary dysfunction • Urinary incontinence (stress) • Urinary symptoms (urgency, frequency, nocturia, dribbling) • Urethral stricture formation (scarring at the urethra) **Sexual dysfunction** • Erectile dysfunction (ED) • Lack of ejaculation • Orgasm changes (without erection, associated with incontinence) • Penile shortening	• Disease progression
Radiation Therapy Effects (external beam or brachytherapy)	
Urinary dysfunction • Urinary incontinence • Dysuria, urgency, frequency, nocturia, dribbling) • Hematuria • Urethral stricture **Sexual dysfunction** • Progressive ED • Decreased semen volume **Bowel dysfunction** • Fecal urgency, frequency, incontinence • Blood in stool • Rectal inflammation, pain	• Disease progression **Urinary dysfunction** • Urethral stricture • Hematuria due to small blood vessel changes **Sexual dysfunction** • ED can be delayed in onset 6 to 36 months after therapy **Bowel dysfunction** • Rectal bleeding secondary to thinning/small blood vessel changes of anterior rectal wall mucosa
Hormone Therapy Effects (androgen deprivation therapy)	
Sexual dysfunction • Loss of libido • ED **Other** • Hot flushes/sweats • Weight gain, abdominal obesity • Change in body image • Excessive emotional reactions and frequent mood changes • Depression • Fatigue/decreased activity • Gynecomastia • Anemia • Body hair loss • Dry eyes	• Osteoporosis, fractures • Metabolic syndrome • Cardiovascular disease (possible increased risk of myocardial infarction) • Diabetes; decreased sensitivity to insulin and oral glycemic agents • Increased cholesterol • Increased fat mass and decreased lean muscle mass/muscle wasting • Venous thromboembolism • Vertigo • Cognitive dysfunction • Disease progression

Long-term Effects Start during treatment and persist	**Late Effects** Start after treatment ends
Expectant Management Effects (active surveillance or watchful waiting)	
• Stress, anxiety, worry • Risks associated with repeat biopsy (active surveillance), PSAs (prostate –specific antigen) and DREs (digital rectal exam) • Symptoms associated with disease progression	• Disease progression
General Psychological Long-term and Late Effects	
• Depression, depressive symptoms • Distress—multifactorial unpleasant experience of psychological, social, and/or spiritual nature • Worry, anxiety • Fear of recurrence • Pain-related concerns • End-of-life concerns: death and dying • Changes in sexual function and/or desire • Challenges with body image (secondary to surgery and/or hormonal therapy) • Challenges with self-image • Relationship and other social role difficulties • Return-to-work concerns and financial challenges	
More Information	
View the American Cancer Society Prostate Cancer Survivorship Care Guideline at: bit.ly/ACSPrCa	

PROSTATE CANCER SURVIVORSHIP CARE GUIDELINE CHECKLIST FOR PROVIDERS

Clinical follow-up care provided to prostate cancer survivors should be individualized based on age, specific diagnosis and treatment protocol.

Surveillance

- ☐ Measure serum PSA level every 6 to 12 months for first 5 years, then annually thereafter. Refer survivors with elevated or rising PSA level back to primary treating specialist for further follow-up and treatment.
- ☐ Perform annual DRE in coordination with cancer specialist to avoid duplication.

Screening for Second Primary Cancers

- ☐ Adhere to ACS screening and early detection guidelines. Prostate cancer survivors having undergone radiation therapy may have slightly higher risk of bladder and colorectal cancers and may need to follow screening guidelines for higher-risk individuals, if available.
- ☐ Perform thorough evaluation to rule out bladder cancer, including urologist referral for cystoscopy, for survivors with hematuria.
- ☐ Refer survivors with persistent **rectal bleeding**, **pain or other symptoms of unknown origin** to appropriate specialist and radiation oncologist to conduct a thorough evaluation for rectal cancer.

Assessment and Management of Physical and Psychological Effects

- ☐ Discuss bowel function and symptoms (e.g., **rectal bleeding**, **sphincter dysfunction**, **rectal urgency** and **frequency**). For men with negative colorectal cancer screening result experiencing **rectal bleeding**, prescribe stool softeners, topical steroids or anti-inflammatories. Refer survivors with persistent rectal symptoms to appropriate specialist.
- ☐ Assess for **distress/depression/PSA anxiety** at least annually using a simple screening tool, such as the Distress Thermometer. Manage **distress/depression** using in-office counseling resources or pharmacotherapy as appropriate. Refer survivors experiencing **distress/depression** for further evaluation and/or treatment by appropriate specialists if needed.
- ☐ Discuss sexual function. Use validated tools, such as the Sexual Health Inventory for Men (SHIM), to monitor erectile function over time. **Erectile dysfunction** may be addressed through a variety of options, including penile rehabilitation or prescription of phosphodiesterase type 5 inhibitors. Refer men with **persistent sexual dysfunction** to a urologist, sexual health specialist or psychotherapist to review treatment and counseling options.
- ☐ Encourage couples to discuss sexual intimacy and refer to counseling or support services as appropriate. Prescribe medication to address **erectile dysfunction**. Instruct couples on use of sexual aids to improve **erectile dysfunction** (men) and **postmenopausal symptoms** (women). Refer to mental health professional with expertise in sex therapy.
- ☐ Discuss urinary function (e.g., **urinary stream**, **difficulty emptying the bladder**) and **incontinence**. Consider timed voiding, prescribing anticholinergic medications (e.g., oxybutynin) to address issues such as **nocturia**, **frequency** or **urgency**. Consider alpha-

blockers (e.g., tamsulosin) for **slow stream**. Refer survivors with **postprostatectomy incontinence** to a physical therapist for pelvic floor rehabilitation; at a minimum, instruct survivors about Kegel exercises. Refer men with **persistent leakage** or **other urinary symptoms** to a urologist for further evaluation (e.g., urodynamic testing, cystoscopy) and discussion of treatment options including surgical placement of a male urethral sling or artificial urinary sphincter for **incontinence**.

- ☐ Perform annual CBC to monitor hemoglobin levels for **anemia** in men receiving androgen deprivation therapy (ADT).
- ☐ Follow U.S. Preventive Services Task Force guidelines for evaluation and screening for cardiovascular risk factors, blood pressure monitoring, lipid profiles, and serum glucose in men receiving ADT.
- ☐ Assess risk of fracture for men treated with ADT or older radiation techniques through baseline DEXA scan and calculation of a FRAX score. For men determined to be high risk, prescribe weekly bisphosphonate therapy (oral alendronate at a dose of 70 mg) or annual intravenous zoledronic acid at a dose of 5 mg to increase bone density. Denosumab is also approved by the FDA to treat men at increased risk of osteoporosis.
- ☐ For men receiving ADT who have vasomotor symptoms (e.g., hot flushes), prescription of selective serotonin or noradrenergic reuptake inhibitors or gabapentin may offer symptom relief (note that it is not approved by the FDA for this indication).

Assessment Tools		
Distress Thermometer	Sexual Health Inventory for Men (SHIM)	Expanded Prostate Cancer Index Composite for Clinical Practice (EPIC-CP)

Health Promotion

- ☐ Assess information needs related to prostate cancer and its treatment, side effects, other health concerns, and available support services. Provide or refer to appropriate resources to meet these needs.
- ☐ Counsel to achieve and maintain healthy weight by limiting consumption of high-calorie foods and beverages and promoting increased physical activity.
- ☐ Counsel to engage in at least 150 minutes per week of physical activity; this may include weight-bearing exercises.
- ☐ Counsel to achieve a dietary pattern high in vegetables, fruits and whole grains. Emphasize consumption of micronutrient-rich and phytochemical-rich vegetables and fruits, low amounts of saturated fat, intake of at least 600 IU of vitamin D per day and adequate amounts of dietary sources of calcium (not to exceed 1200 mg/d). Refer survivors with nutrition-related challenges (e.g., bowel problems that impact nutrient absorption) to registered dietitian.
- ☐ Counsel to avoid or limit alcohol consumption to no more than 2 drinks per day.
- ☐ Assess for tobacco use and offer and/or refer to cessation counseling and resources. Counsel to avoid tobacco products.

Care Coordination

- ☐ Primary treating specialist is encouraged to provide a treatment summary and survivorship care plan to primary care provider when survivorship care is transferred. Primary care providers and treating oncology specialists should confer regarding survivorship care plan components and determine roles and responsibilities appropriate for survivor's condition and resources available in the primary care setting.
- ☐ Primary care providers should maintain role as general medical care coordinator throughout spectrum of prostate cancer detection, treatment, and aftercare, focusing on preventive care and management of preexisting comorbid conditions, regularly addressing patient's overall physical and psychosocial status, and those components of survivorship care mutually agreed upon with treating clinicians.
- ☐ Annually assess for presence of long-term or late effects of prostate cancer and its treatment. Use of a validated tool such as EPIC-CP may be helpful in this assessment.
- ☐ Encourage inclusion of caregivers, spouses, or partners in usual prostate cancer survivorship care.
- ☐ Refer to appropriate community-based and peer support resources.

View the American Cancer Society Prostate Cancer Survivorship Care Guideline at: bit.ly/ACSPrCa