



Guideline 26-4

A Quality Initiative of the
Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

Follow-up Care and Psychosocial Needs of Survivors of Prostate Cancer

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An assessment conducted in February 2024 deferred the review of Guideline 26-4. This means that the document remains current until it is assessed again next year. The PEBC has a formal and standardized process to ensure the currency of each document ([PEBC Assessment & Review Protocol](#))

Guideline 26-4 is comprised of 5 sections. You can access the summary and full report here:

<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/266>

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Guideline 26-4: Section 1

Follow-up Care and Psychosocial Needs of Survivors of Prostate Cancer: Recommendations Summary

Note To Users Of This Summary

This Recommendations Summary may be useful as a quick reference to this guideline. Users are advised to consult the Complete Guideline Report for more information about the evidence base for these recommendations, the quality of the evidence, the interpretation of the evidence and the guideline development process.

GUIDELINE OBJECTIVES

The primary objective of this guideline is to develop recommendations related to the frequency by which prostate-specific antigen (PSA) levels should be tested in men after curative-intent treatment for prostate cancer and to define the most appropriate diagnostic testing if biochemical (BC) recurrence occurs. The secondary objective is to develop recommendations that address psychosocial issues, sexual health, fatigue, urinary health, and bowel health outcomes associated with treatment for prostate cancer.

TARGET POPULATION

Prostate cancer patients who have undergone curative-intent treatment are the target population for this guideline. For prostate cancer patients who are on active surveillance, please refer to [PEBC Guideline 17-9](#).

INTENDED USERS

This guideline is targeted for radiation oncologists specializing in prostate cancer, family physicians, urologists, nurses, allied health professionals, and any other care provider involved in follow-up care of prostate cancer.

RECOMMENDATIONS

RECOMMENDATION 1

No evidence-based recommendation can be made with respect to follow-up schedule of PSA testing for prostate cancer survivors following curative-intent treatment with surgery.

However, if PSA levels remain undetectable, the Prostate Cancer Follow-up Expert Panel suggests the following as a reasonable schedule. This schedule for PSA testing is in line with PSA kinetics following therapy, other guidelines, and their clinical experience:

- Every three months in year 1
- Every six months in year 2
- Annually thereafter

Qualifying Statements for Recommendation 1

- If PSA levels become detectable, a more frequent PSA surveillance schedule may be appropriate.

- Even though PSA follow-up is recommended annually until end of life, healthcare professionals should use their own discretion in determining the applicability of annual surveillance in patients who are unlikely to benefit from salvage therapy.

RECOMMENDATION 2

No evidence-based recommendation can be made with respect to follow-up schedule of PSA testing for prostate cancer survivors following curative-intent treatment with non-surgery primary therapy, including any form of radiation therapy, cryotherapy, or high-intensity focused ultrasound.

However, the Prostate Cancer Follow-up Expert Panel suggests the following as a reasonable schedule. This schedule for PSA testing is in line with PSA kinetics following therapy, other guidelines, and their clinical experience:

- First test six months after treatment completion
- Every six months until end of year 5
- Annually thereafter

Qualifying Statements for Recommendation 2

- Even though PSA follow-up is recommended annually until end of life, healthcare professionals should use their own discretion in determining the applicability of annual surveillance in patients who are unlikely to benefit from salvage therapy.

RECOMMENDATION 3

Upon biochemical recurrence, the following diagnostic imaging may be considered:

Diagnostic Test	Appropriateness	Notes
When local salvage therapy is planned after radiotherapy:		
Bone scan	Usually appropriate	• Appropriate for all men being considered for local salvage therapy
CT	Usually appropriate	• Appropriate for thorax, abdomen and pelvis imaging
Multiparametric MRI	Sometimes appropriate	• Appropriate when used for targeted biopsy
FDG, NaF, or choline PET	Not usually appropriate	• Use of NaF and choline PET should be considered experimental
When salvage radiotherapy is planned after radical prostatectomy:		
Bone scan	Not usually appropriate	• If performed before initiating salvage RT, would not change treatment decision
CT	Not usually appropriate	• If performed before initiating salvage RT, would not change treatment decision
Multiparametric MRI	Not usually appropriate	• If performed before initiating salvage RT, would not change treatment decision
FDG, NaF, or choline PET	Not usually appropriate	• Use of NaF and choline PET should be considered experimental
Abbreviations: CT, computed tomography; FDG, fluorodeoxyglucose; MRI, magnetic resonance imaging; NaF, sodium fluoride; PET, positron emission tomography; PSA, prostate-specific antigen; RT, radiation therapy.		
Note: Salvage therapy refers to follow-up treatment provided after biochemical recurrence.		

Qualifying Statements for Recommendation 3

- Diagnostic imaging should only be ordered if that test will result in management decisions; consideration should be given to the appropriateness of the test, coupled with available salvage options.
- Salvage therapies following radiation therapy or ablation therapies need to be performed at specialized centres, with imaging decisions dependent on the local evaluation process.

RECOMMENDATION 4

In men who are not being evaluated through regularly scheduled clinical visits, a PSA test should be performed if the following symptoms develop. Additionally, diagnostic imaging specific to the patient’s symptom(s) may be indicated.

- Severe and progressive axioskeletal bone pain
- Unexplained weight loss
- Hematuria
- New urinary symptoms
 - Significant incontinence requiring changing of undergarments, pads, or diapers
 - Urgency
 - Obstructive symptoms
 - Voiding discomfort
 - Nocturia
- Swelling of legs
- New bowel symptoms
 - Rectal bleeding
 - Rectal pain
 - Urgency
 - Change in bowel movement
- Fatigue
 - Tiredness unrelated to sleep disturbance
 - Lack of energy
 - Weakness or lack of muscle strength
 - Physical, emotional and/or cognitive exhaustion

RECOMMENDATION 5

Men experience very specific and oftentimes long-lasting effects after their primary therapy, usually occurring more than three months after surgery or radiation, or during/after androgen deprivation therapy (ADT). Follow-up healthcare providers should be aware of the domains of quality of life potentially affected by treatment for prostate cancer and the management options available to combat them. Research surrounding management options is lacking. Included management options that are based on the clinical standard in Ontario or expert opinion of the Prostate Cancer Follow-up Expert Panel have been denoted with an asterisk (*). The symptoms listed are based on known profiles; however, individual men respond differently to treatments, resulting in individual side-effect profiles. To ensure optimal quality of life in these men, individual patient-reported outcomes should be measured.

Side-Effect	Primary Treatment	Management Options
Sexual Dysfunction		
<i>A guideline focusing on the sexual health of cancer patients is under development (PEBC Guideline 19-</i>		

Side-Effect	Primary Treatment	Management Options
<i>6) and will provide more in-depth recommendations for sexual dysfunction outcomes.</i>		
Erectile dysfunction	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men may be prescribed PDE5 inhibitors as first line treatment* • Men who do not respond to PDE5 inhibitors will need more advanced treatments and should be referred to a urologist* • Men may be referred to penile rehabilitation programs, which include PDE5 inhibitors, vacuum constriction devices, intracorporal or intraurethral therapy, or placement of penile prostheses*
Loss of libido	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men and their partners should be referred to a healthcare professional with training in sexual health counselling • Testosterone therapy can be considered in men with signs and symptoms of testosterone deficiency and documented low serum testosterone levels provided their cancer is treated and without evidence of persistent or recurrent disease, and if prescribed by the treating oncologist after extensive review of the potential risks*
Anorgasmia	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men and their partners should be referred to a healthcare professional with training in sexual health counselling*
Dry ejaculate	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men should be educated on dry ejaculate*
Climaturia	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men should be provided education on self-management strategies, such as emptying the bladder before sexual relations, use of a condom, use of a penile constriction band, and Kegel exercises*
Penile shortening or curvature	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men may be prescribed PDE5 inhibitors, intraurethral and intracorporal prostaglandins, vacuum erection device, or penile prostheses*
Infertility	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men and their partner should be informed that men treated with rP will become infertile • Men and their partners should be informed that some men treated with RT may remain fertile, even when experiencing sexual dysfunction symptoms*
Urinary Dysfunction		
Obstructive symptoms	Surgery and RT	<ul style="list-style-type: none"> • Men should be referred to a urologist to determine whether bladder neck dilatation, transurethral resection, or clean intermittent catheterization may be necessary* • Selective alpha antagonists (not in men who underwent rP) may be prescribed*
Urgency symptoms	Surgery and RT	<ul style="list-style-type: none"> • If the man is able to completely empty his bladder, anticholinergic medications may be appropriate* • All refractory symptoms should result in a referral to a urologist for evaluation and escalation of therapy if appropriate*
Hematuria	RT	<ul style="list-style-type: none"> • Men with hematuria should be referred to a urologist for evaluation*
Incontinence requiring urinary pads	Surgery and RT	<ul style="list-style-type: none"> • Men with persistent leakage impacting QoL should be referred to a urologist to evaluate the cause of incontinence (stress, overflow, etc)* • Exercise intervention including resistance, flexibility, and Kegel exercises may improve continence. Specialized physiotherapists may help patients with stress incontinence following rP • In men with post-prostatectomy incontinence who are unable to perform pelvic floor training, urethral slings or artificial urinary sphincters can be considered
Bowel Dysfunction		
Rectal bleeding	RT	<ul style="list-style-type: none"> • All men with rectal bleeding should be referred to a

Side-Effect	Primary Treatment	Management Options
		<p>gastroenterologist for colonoscopy if not done within five years*</p> <ul style="list-style-type: none"> • For men with rectal bleeding post-RT, referral to a gastroenterologist who has experience in managing RT proctitis is recommended. The anterior rectum should only be biopsied when absolutely necessary as this can cause a fistula of the rectum* • For men with bleeding secondary to RT proctitis, the following strategies may be considered: * <ul style="list-style-type: none"> ○ Dietary changes to bulk stool ○ Hydration education ○ Medical treatments (Salofalk [mesalamine] suppositories, topical formalin, or argon plasma laser treatments) ○ Refractory RT proctitis should be considered for hyperbaric oxygen
Urgency and frequency symptoms	RT	<ul style="list-style-type: none"> • For men with urgency and frequency symptoms, the following options may be considered: * <ul style="list-style-type: none"> ○ Dietary changes to bulk stool ○ Hydration education ○ Medical treatments (antidiarrheals, anticholinergics) ○ Pelvic floor muscle therapy
Other Physical Side-Effects		
Anemia	ADT	<ul style="list-style-type: none"> • Investigation for common sources of anemia should be considered*
Body composition alterations	ADT	<ul style="list-style-type: none"> • Men should be encouraged to participate in an exercise program <ul style="list-style-type: none"> ○ Strategies thoroughly described in PEBC Guideline 19-5 (in development)
Fatigue	Surgery, RT, and ADT	<ul style="list-style-type: none"> • Men should be encouraged to participate in an exercise program <ul style="list-style-type: none"> ○ Strategies thoroughly described in PEBC Guideline 19-5 (in development)
Gynecomastia/Mastodynia	ADT	<ul style="list-style-type: none"> • In severe cases, surgical excision can be considered and patients should be referred to the appropriate specialist*
Hot flushes	ADT	<ul style="list-style-type: none"> • Treatment with diethylstilbestrol, megestrol acetate, venlafaxine, cyproterone acetate, and medroxyprogesterone have been shown to decrease number of hot flushes, but should be used with caution because treatment with these medications have been associated with adverse side-effects (e.g., gynecomastia, depression, weight gain, muscle spasms, insomnia, nausea, elevated blood pressure)
Physical activity/function	ADT	<ul style="list-style-type: none"> • Men should be encouraged to participate in an exercise program <ul style="list-style-type: none"> ○ Strategies thoroughly described in PEBC Guideline 19-5 (in development)
Bone health	ADT	<ul style="list-style-type: none"> • This outcome described in PEBC Guideline 3-14v2 (in development)
QoL and Psychosocial Side-Effects		
Cognitive side-effects	ADT	<ul style="list-style-type: none"> • Healthcare provider may consider neurocognitive assessment*
Psychological distress (depression and anxiety)	Surgery, RT, and ADT	<ul style="list-style-type: none"> • In-office psychological therapy and pharmacotherapy as appropriate • Recommendations for depression in cancer survivors are described in PEBC Guideline 19-4v2
General QoL and Psychosocial sequelae	Surgery, RT, and ADT	<ul style="list-style-type: none"> • During scheduled follow-up clinical visits, the psychosocial status of men should be assessed and distress should result in referral to specialized psychosocial care* • Patients should be encouraged to participate in an exercise program <ul style="list-style-type: none"> ○ Strategies more thoroughly described in PEBC Guideline 19-5 (in development)

Side-Effect	Primary Treatment	Management Options
		<ul style="list-style-type: none"> • Referral to applicable support groups for coping training for couples, as well as social and emotional QoL well-being, may be considered
Abbreviations: ADT, androgen deprivation therapy; PDE5, phosphodiesterase type 5; QoL, quality of life; rP, radical prostatectomy; RT, radiation therapy.		

RECOMMENDATION 6

No diet plan can be recommended because no diet plan or food supplement has been associated with improved cancer outcomes.

RECOMMENDATION 7

For prostate cancer survivors who have completed curative-intent therapy, surveillance is required and may be provided by the treating oncologist, urologist, family physician, nurse practitioner, or hospital-based nurses. Models of care are described more thoroughly in [PEBC Guideline 26-1](#).

Qualifying Statements for Recommendation 7

- All healthcare practitioners that provide PSA surveillance should manage PSA as per the current [CCO Prostate Cancer Pathway](#).
- Although the identified literature only evaluated hospital-based nurse-led care and shared care within the hospital setting, expert opinion supports family physicians being involved in all survivorship care models.
- With the greater emphasis on a person-centred approach to care, a multidisciplinary approach to survivorship, which includes a psychosocial focus to recovery, is recommended. Although the shared care model identified by the literature did not include a psychosocial intervention focus, in order to provide person-centred care, expert opinion supports multiple disciplines being involved in shared care models.