Epidemiology

Prostate cancer is the leading cause of cancer in men (excluding Non Melanoma Skin Cancer). Over 3,300 men are diagnosed with prostate cancer in Ireland each year. The cumulative life time risk (to age 75) of prostate cancer diagnosis is 13.34% and accounts for 11.0% of all invasive cancers in Ireland. For prostate cancer, there was a marked increase in five-year survival from 66% to 92% between 1994-1998 and 2009-2013.¹

Aim

The aim of this guideline is to help GPs assess if a man should be referred to one of the NCCP Rapid Access Prostate Clinics (RAPC).

The following patient groups are covered in this guideline:

1. Men who present with symptoms suspicious of advanced prostate cancer
2. Men between 50 and 70 years of age with no symptoms
3. Men under 50 years of age with no symptoms
4. Men greater than 70 years of age with no symptoms
5. Men of any age who present with Lower Urinary Tract Symptoms (LUTS)

How to Refer

Patients should be referred electronically to one of the RAPC. Electronic referrals are sent via healthlink (www.healthlink.ie), or by using any of the following Irish College of General Practitioner (ICGP) accredited software systems:

- Complete GP
- Helix Practice Manager
- HealthOne
- Socrates

If electronic referral is not possible, a referral can be posted on a NATIONAL RAPID ACCESS PROSTATE CLINIC REFERRAL FORM.

Prostate cancer referral forms can be downloaded at the following web link:
http://hse.ie/eng/services/list/5/cancer/profinfo/resources/gpreferences/

Specific information on 5α-reductase inhibitors:

- 5α-reductase inhibitors reduce PSA (Prostate Specific Antigen) levels (please refer to manufacturer’s instructions)
- A baseline PSA should be carried out 6 months after commencing 5α-reductase inhibitors
- An increase in PSA while on 5α-reductase inhibitors irrespective of absolute PSA values may indicate prostate cancer. Consider referral to a RAPC in patients aged under 70 and to a urologist in patients aged over 70

Men who present with symptoms suspicious of advanced prostate cancer

1. Men who present with symptoms suspicious of advanced prostate cancer
   - New onset bone pain at rest,
   - Unexplained weight loss,
   - Symptoms suggestive of Cauda Equina (should be referred directly to the emergency department)

2. Men between 50 and 70 years of age with no symptoms
3. Men under 50 years of age with no symptoms
4. Men greater than 70 years of age with no symptoms
5. Men of any age who present with Lower Urinary Tract Symptoms (LUTS)

Explain need for prostate assessment and provide patient information leaflet

Prostate assessment – PSA (Prostate Specific Antigen) and DRE (Digital Rectal Examination)

Normal age related PSA value and non-suspicious DRE

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Normal PSA Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50 years</td>
<td>&lt;2µg/L</td>
</tr>
<tr>
<td>50-59</td>
<td>&lt;3µg/L</td>
</tr>
<tr>
<td>60-69</td>
<td>&lt;4µg/L</td>
</tr>
<tr>
<td>70+</td>
<td>&lt;5µg/L</td>
</tr>
</tbody>
</table>

Raised age related PSA and/or suspicious DRE

<table>
<thead>
<tr>
<th>Age Group</th>
<th>PSA Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50 years</td>
<td>≥2µg/L</td>
</tr>
<tr>
<td>50-59</td>
<td>≥3µg/L</td>
</tr>
<tr>
<td>60-69</td>
<td>≥4µg/L</td>
</tr>
<tr>
<td>70+</td>
<td>≥5µg/L</td>
</tr>
</tbody>
</table>

Less than or equal to 70 years of age

Investigate as clinically appropriate
A prostate review may be considered in two years

Greater than 70 years of age

- Referral to a Rapid Access Prostate Clinic
- Urgent referral to a urologist
Men between 50 and 70 years of age with no symptoms

PSA (Prostate Specific Antigen) should not be considered a routine test, and informed consent should be obtained.

Shared decision making
If PSA is being considered then the GP should discuss patient’s concerns, benefits/harms/risks of prostate assessment (See Box 1) and provide patient information leaflet.

Decision to proceed to prostate assessment – PSA and DRE (Digital Rectal Examination)

- Normal age related PSA value and non-suspicious DRE
  - Under 50 years of age: <2µg/L
  - 50-59: <3µg/L
  - 60-69: <4µg/L
  - 70+: <5µg/L
  - No further action required. A prostate review may be considered in two years

- Raised age related PSA and non-suspicious DRE
  - Under 50 years of age: ≥2µg/L
  - 50-59: ≥3µg/L
  - 60-69: ≥4µg/L
  - 70+: ≥5µg/L
  - Repeat PSA 6-12 weeks later, in the same laboratory

- Suspicious DRE irrespective of PSA results
  - Referral to a Rapid Access Prostate Clinic

Decision not to proceed to prostate assessment at this time

Potential benefits

- Prostate assessment may lead to early detection of treatable cancer

Potential harms/risks

- Potential false positive and false negative results
- Risk of side effects from investigations and treatment
- Unnecessary anxiety for the patient and their family

Patient groups at higher risk of prostate cancer

- African ethnicity
- Increased risk with number of family members and early age of onset (<50)
- Increased risk of aggressive disease in patients with BRCA1/2 mutations
Men under 50 years of age with no symptoms

PSA (Prostate Specific Antigen) should not be considered a routine test, and informed consent should be obtained.

Shared decision making
If PSA is being considered then the GP should discuss patient’s concerns, benefits/harms/risks of prostate assessment (See Box 2) and provide patient information leaflet.

Decision to proceed to prostate assessment – PSA and DRE (Digital Rectal Examination)

Normal age related PSA value (<2µg/L) and non-suspicious DRE

No further action required at this time.
A prostate review may be considered in two years.

Raised PSA (≥2µg/L) and non-suspicious DRE

Repeat PSA 6-12 weeks later, in the same laboratory.

Suspicious DRE irrespective of PSA results

Referral to the Rapid Access Prostate Clinic.

Decision not to proceed to prostate assessment at this time.

Referred patients

Repeated age related PSA <2µg/L

No further action required at this time.
A prostate review may be considered in two years.

Repeated age related PSA ≥2µg/L

Referral to the Rapid Access Prostate Clinic.

Patient groups at higher risk of prostate cancer

- African ethnicity
- Increased risk with number of family members and early age of onset (<50)
- Increased risk of aggressive disease in patients with BRCA1/2 mutations

Potential benefits
- Prostate assessment may lead to early detection of treatable cancer

Potential harms/risks
- Potential false positive and false negative results
- Risk of side effects from investigations and treatment
- Unnecessary anxiety for the patient and their family

Box 2: Items for discussion during shared decision making in men under 50 years with no symptoms

Potential benefits
- Prostate assessment may lead to early detection of treatable cancer

Potential harms/risks
- Potential false positive and false negative results
- Risk of side effects from investigations and treatment
- Unnecessary anxiety for the patient and their family

Patient groups at higher risk of prostate cancer
- African ethnicity
- Increased risk with number of family members and early age of onset (<50)
- Increased risk of aggressive disease in patients with BRCA1/2 mutations

PSA (Prostate Specific Antigen) should not be considered a routine test, and informed consent should be obtained.
**Men greater than 70 years of age with no symptoms**

PSA (Prostate Specific Antigen) should not be considered a routine test, and informed consent should be obtained.

GP should consider patients comorbidities and life expectancy.

If the patient is over 70 years of age, healthy and fit, with a life expectancy greater than 10 years:

- Potential benefits:
  - Testing of men with no symptoms over 70 years for prostate cancer is unlikely to affect their overall survival.
  - BPH (Benign Prostatic Hyperplasia) is common and can raise PSA in this age group.
  - Prostate assessment may lead to management of treatable cancer in those with a life expectancy >10 years.

- Potential harms/risks:
  - Potential false positive and false negative results.
  - Risk of side effects from investigations and treatment.
  - Unnecessary anxiety for the patient and their family.

No further investigation for prostate cancer advised at this time.

If the patient is over 70 years of age, has life limiting comorbidities and life expectancy less than 10 years:

- Shared decision making:
  - GP should discuss patient’s concerns, benefits/harms/risks of prostate assessment (See Box 3) and provide patient information leaflet.

Decision not to proceed to prostate assessment at this time.

**Shared decision making:**

- GP should discuss patient’s concerns, benefits/harms/risks of prostate assessment (See Box 3) and provide patient information leaflet.

**Decision to proceed to prostate assessment**

- PSA and DRE (Digital Rectal Examination)

- Normal age related PSA (<5µg/L) value and non-suspicious DRE:
  - No further action required.

- Raised PSA (≥5µg/L) and non-suspicious DRE:
  - Repeat PSA 6-12 weeks later, in the same laboratory.

- Suspicious DRE irrespective of PSA results:
  - Urgent referral to a urologist.

- Raised PSA (≥5µg/L) and non-suspicious DRE:
  - Repeated PSA ≥5µg/L:
    - Urgent referral to a urologist.
  - Repeated PSA <5µg/L:
    - No referral required at this time.
Men of any age who present with Lower Urinary Tract Symptoms (LUTS)

PSA (Prostate Specific Antigen) should not be considered a routine test, and informed consent should be obtained.

Urinalysis

Positive

Manage appropriately, allow 6 weeks for symptom resolution

Recommend a standard LUTS evaluation (including International Prostate Symptom Score (IPSS), PSA and DRE (Digital Rectal Examination))

Negative

Normal age related PSA value and non-suspicious DRE
Under 50 years of age <2µg/L
50-59 <3µg/L
60-69 <4µg/L
70+ <5µg/L

Treat as Benign Prostatic Hyperplasia (BPH)

Raised age related PSA and non-suspicious DRE
Under 50 years of age ≥2µg/L
50-59 ≥3µg/L
60-69 ≥4µg/L
70+ ≥5µg/L

Repeat PSA 6-12 weeks later, in the same laboratory

Repeated age related PSA is within the normal range

Treat symptoms
Consider repeating PSA at 6 months to ensure stability

Suspicious DRE irrespective of PSA result

Less than or equal to 70 years of age

Greater than 70 years of age

Repeat PSA 6-12 weeks later, in the same laboratory

Repeated age related PSA is raised

Less than or equal to 70 years of age

Greater than 70 years of age

Referral to a Rapid Access Prostate Clinic
Urgent referral to a urologist

Men of any age who present with Lower Urinary Tract Symptoms (LUTS)
Disclaimer: This guideline represents the view of the NCCP, which was arrived at after careful consideration of the evidence available. Health professionals as autonomous practitioners are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of health professionals to make decisions appropriate to each patient. This guideline will be reviewed as new evidence emerges, and supersedes all previous HSE/NCCP prostate cancer GP referral guidelines.