Recognition & Referral of Suspected Cancer

NICE Guidelines (NG12) & Streamlined Diagnostic Pathways

By Dr Tina George

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Clinical Network Lead for Awareness & Earlier Diagnosis (South East)

09/03/17
Awareness & Early Diagnosis

• Early diagnosis is the key to beating cancer

• Cancers diagnosed at an earlier stage have better rates of cure and 5-year survival increases very significantly

• There is value in diagnosing cancer even for palliation
Topics to be covered

1. An overview of the NICE guidance (NG12)
2. An update on local implementation
3. A closer look at the top 4 cancers
4. RCGP / CRUK Case Histories
5. Helpful Resources
A) Patient notices symptoms and decides whether to present

B) Patient presents (usually in Primary Care)

C) Doctor recognises cancer is a possibility and refers accordingly

D) Definitive Investigations

E) Treatment Begins

- Improved patient awareness
- Support primary care in the quest for earlier diagnosis
- Access to investigations

Scope for avoiding delays in the patient pathway

* Screening services for the asymptomatic *
The new guidelines (NG12) build upon those published in 2005

The document is far-reaching;
(i) referral guidelines have been updated for almost every tumour group and
(ii) both adults and children are affected

Recommendations broken down by tumour group & symptom clusters

Symptoms durations gone
New NICE guidance: An overview

Key changes include;

- Reliance on new evidence from primary, rather than secondary care
- Recommends urgent investigations in adults with a $\geq 3\%$ risk of cancer but uses a lower threshold for children & young people
- Contains a range of recommendations ranging from a GP clinical examination to immediate referrals to specialists
- Clear in its expectation that GPs should have more direct access to diagnostic tests
Direct Access to Diagnostics

The new guidance advocates GP direct access to:

- CXRs
- Non-obstetric USS
- Upper GI endoscopy
- CT scans (abdomen)
- MRI brain

Non-imaging diagnostics recommended include; relevant blood tests, urinary Bence-Jones protein and faecal occult bloods
Beware: it’s not necessarily a “2-week rule”!

Broadly, 4 tiers of urgency (for diagnostics and referrals) advocated in the guidance;

- Immediate
- Very urgent (within 48 hours)
- Urgent (within 2 weeks) or
- Non-urgent (no time-frame specified)
Patient info and safety netting....

- It is recommended that patients are informed they are being referred for suspected cancer
- Patient information sheets may help
- Ensure results of investigations are acted upon - the healthcare professional who ordered the investigation should take or explicitly pass on responsibility for this
- Consider a review for people with any symptom that is associated with an increased risk of cancer.
- **Beware tests with high false –ves** (e.g. CXRs, FOBts)
An Update from CCGs and TSSGs

- The 12 new referral proformas are almost ready to go-live.

- Not all direct access diagnostics are currently available (but if unavailable, patients can still be referred to the specialty urgently on a suspected cancer pathway).

- A phased roll-out of the new forms is under consideration.

- CCG Cancer Leads will be supporting Primary Care during the process of implementation.
**Further Information and Guidance**

**Site-specific information and advice for Primary Care:**

**Consider a non-urgent referral**
- Patients aged 60yrs or over with recurrent or persistent UTI that is unexplained.

**Urgent referral/ Discussion with secondary team**
- Hydronephrosis of unknown cause or symptomatic renal/ ureteric colic

**PSA testing**
- Consider arranging a PSA test (with counselling) and a digital rectal examination (DRE) in men with:
  - Lower urinary tract symptoms (LUTS) (nocturia, frequency, hesitancy, urgency or retention)
  - Erectile dysfunction
  - Visible haematuria

**Haematuria**
- Safety net patients following positive haematuria result.
- Consider the possibility of gynaecology pathology in females with haematuria.

**Urine dipstick testing**
- Ensure urine dipstick testing in primary care is in accordance with manufacturer’s guidance.
- Ensure urinary tract infections are treated appropriately (in accordance with local guidelines and results of culture).

**Useful websites:**
- CRUK main
- CRUK learning
- e-CDS
- Genetics and Family History
- Macmillan
- Macmillan learning
- Map of Medicine
- NICE
- Q-Cancer
- RAT
- RCGP learning (members only)
- Wessex Clinical Network

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**Example of a referral proforma**

<table>
<thead>
<tr>
<th>Trust Name</th>
<th>Conquest Hospital Han</th>
<th>Eastbourne DGH</th>
<th>Brighton and Sussex Hospitals NHS Trust</th>
<th>Queen Victoria Hospital, Grinstead</th>
<th>Western Sussex Hospitals Foundation Trust</th>
</tr>
</thead>
</table>
| **Patient Demographics**
Surname: | | | | | |
DOB: | | | | | |
Ethnicity: | | | | | |
Patient Address: | | | | | |
Tel: | | | | | |
| **GP Practice Details**
Usual GP Name: | | | | | |
Practice Name: | | | | | |
Practice Address: | | | | | |
Telephone: | | | | | |
| **Referring Clinician**
Supporting Patient Info:
History of cognitive impairment:
Please give details:
History of sensory impairment:
Please give details:
If the patient has a morbidity:
Preferred language: | | | | | |
| **Patient Engagement**
I have discussed this case with the secondary care team, please specify with a 2WW referral leaflet they will need to attend an appointment within the next two weeks.
Please detail any dates the patient is NOT available for an appointment: | | | | | |
| **Prostate Cancers**
Prostate:
(NB: the following information is for males only)
Refer to the local clinical guidelines for details.
If the PSA result is above the upper limit of normal range:
Further investigations are required.
Investigations:
Please ensure the following results of culture:
Ensure urine dipstick testing in primary care is in accordance with manufacturer’s guidance.
| **Male specific**
If this cancer is suspected, we recommend direct access into the specialist service in men with unexplained or persistent testicular symptoms.
Please consider:
- Mass
- Ulceration
- Unexplained or persistent pain
- Visible testicular changes:
Please ensure the following:
Ensure patient's WHO perform with any other fields which might be helpful to secondary care.
| **Hospital Admin Usage Only**
Consultant comments: | | | | | |
Date received: Date 1st appointment:

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**Guidance**
If PSA result is normal, further investigation is not required.
Consider direct access USS in men with unexplained or persistent testicular symptoms.
Consider a non-urgent referral for any other fields which might be helpful to secondary care.

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**Additional Clinical Information**
- Male specific:
  - Consider the possibility of gynaecology pathology in females with haematuria.
  - Consider a non-urgent referral for any other fields which might be helpful to secondary care.
- Male specific:
  - Consider the impact of referring patients with significant comorbidities and very frail.
  - Please give details:
- Male specific:
  - Consider a non-urgent referral for any other fields which might be helpful to secondary care.

---

**Cancer Type suggested**
- Penile – consider (after STI excluded/treatment completed)
  - Mass
  - Ulceration
  - Unexplained or persistent pain
  - Visible testicular changes:
  - Please consider:
  - Mass
  - Ulceration
  - Unexplained or persistent pain
  - Visible testicular changes:

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**Investigations**
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**Additional Clinical Information**
- Male specific:
  - Consider testing for prostate cancer:
    - PSA testing
    - If the PSA result is above the upper limit of normal range:
      - Further investigations are required.
      - Investigations:
        - Please ensure the following results of culture:
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The Top 4 Cancers

...and how to use the new referral criteria
A large-scale, UK-based lung cancer study (involving 20,142 patients who consulted with Primary Care) was published in Thorax & the BMJ.

Results revealed out of 20,142 patients:

• One in 20 were diagnosed at death
• One in 10 died within 1 month of diagnosis
• 15% died between 1-3 months of diagnosis
Encourage smoking cessation. Prevention though smoking cessation will have the biggest impact on our national lung cancer profile.

Q) What % of lung cancer patients have a personal history of smoking?

a) 95%  b) 90%  c) 86%

Patients with a cough for 3 weeks or more should have a CXR.

Ensure there is a robust system in place to follow up abnormal initial chest X-rays.
The ACE Programme

A national project, to **Accelerate, Co-ordinate & Evaluate** (ACE) local initiatives to promote earlier diagnosis of cancer

In accordance with best practice recommendations, a new system was piloted at BSUH whereby following review by a radiologist, suspicious CXRs are referred promptly by the Trust for CT scans
Not a pathway for GP direct access to chest CTs

Is a system to ensure symptomatic patients with abnormal CXRs (likely to represent cancer) have quicker access to CTs

Preliminary data positive (between April & September 2016)

- 7,918 GP referred patients to BSUH for a CXR, with 39% referred on the new ACE CXR form.
- Prior to pilot, 31 radiology staff reported CXRs. During the pilot this was reduced to 7 radiology staff, who have a special focus on CXRs.
- Prior to pilot, time from CXR to CT was 19 days. During pilot it was 7 days.
- Prior to pilot, time from CXR to Chest OPD was 27 days. During pilot it was 18 days. This included a new pre-diagnostic MDT Meeting.
Use of the new CXR form and patient information leaflet streamlines the diagnostic pathway.

Radiologists find the new ACE CXR form more helpful.

Compatible with Order Comms.
### GP Chest X-Ray Request

**Referral priority:** Routine □ URGENT □

<table>
<thead>
<tr>
<th>PATIENT DETAILS</th>
<th>GP DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full name:</strong></td>
<td>Referrers Name:</td>
</tr>
</tbody>
</table>

**Address:**

**Home Tel:**

**Mobile Tel:**

**Patient email:**

**D.O.B:**

**NHS Number:**

**Gender:**

**UBRN Number:**

#### CRITERIA FOR REFERRAL (Please tick)

- □ Cough (lasting more than 3 weeks)
- □ Persistent or recurrent chest infections
- □ Loss of weight / loss of appetite / fatigue
- □ Haemoptysis (esp. if age >40 in a smoker)
  - Unexplained Haemoptysis in patients over the age of 40 years should be referred on 2ww and ensure CXR requested at same time*
- □ Underlying chronic respiratory problems with unexpected changes in existing symptoms
- □ Chest pain (non-cardiac) / shoulder pain (with no obvious cause)
- □ Hoarseness
- □ Rapidly worsening dyspnoea / spirometry
- □ Finger clubbing
- □ Supraclavicular or persistent cervical lymphadenopathy
- □ Thrombocytosis
- □ Superior vena caval obstruction*
- □ Stridor*

*consider urgent referral to chest team (not ED or AMU) by telephone

#### RISK FACTORS (Please tick)

- Current smoker
- Chronic obstructive pulmonary disease
- Ex-smoker
- Exposure to asbestos
- Previous history of any cancer (especially head and neck)

#### RECENT BLOOD TESTS

- Latest Creatinine
- Date
- Latest eGFR
- Date

**Date of LMP:**

#### ANTIBIOTIC HISTORY

- □ The patient has recently completed a full course of antibiotics for a presumed chest infection (Please tick)

#### ADDITIONAL INFORMATION

**Referrer’s Signature:**

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*consider urgent referral to chest team (not ED or AMU) by telephone*
IMPORTANT PATIENT INFORMATION

Your GP has requested that you have a chest x-ray. We would encourage you to have your chest x-ray as soon as possible as some conditions may get worse if not treated promptly. Your x-ray report will be available to your GP within one week.

In some cases after a chest x-ray, a hospital specialist may decide that further investigations are required. In that case, a member of staff from Royal Sussex County Hospital will contact you directly to arrange a CT (Computerised Tomography) scan.

You and your GP will receive the CT result two weeks after the scan. Some patients may be contacted directly by Royal Sussex County Hospital to arrange a hospital appointment to discuss your CT scan results.

GOING FOR YOUR X-RAY

You can have your chest x-ray at Hove Polyclinic, Princess Royal or Lewes Victoria Hospitals which operate a walk-in system, therefore no appointment is required or Royal Sussex County Hospital by appointment only. Please take your x-ray form with you to the Radiology Department.

<table>
<thead>
<tr>
<th>Hove Polyclinic</th>
<th>Princess Royal Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevill Avenue</td>
<td>Lewes Road</td>
</tr>
<tr>
<td>Hove BN3 7HY</td>
<td>Haywards Health RH16 4EX</td>
</tr>
<tr>
<td>Telephone: 01273 242011</td>
<td>Telephone: 01444 441881 Ext 8331</td>
</tr>
<tr>
<td>Opening times: Monday–Friday 9am – 4:30pm</td>
<td>Opening times: Monday–Friday 9am – 5pm</td>
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</table>

<table>
<thead>
<tr>
<th>Lewes Victoria Hospital</th>
<th>Royal Sussex County Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevill Road</td>
<td>Eastern Road</td>
</tr>
<tr>
<td>Lewes BN7 2PE</td>
<td>Brighton BN2 5BE</td>
</tr>
<tr>
<td>Telephone: 01273 474153</td>
<td>Telephone: 01273 696955</td>
</tr>
<tr>
<td>Opening times: Monday–Friday 1pm – 4pm</td>
<td>To book Mon-Fri 9am – 4:15pm</td>
</tr>
</tbody>
</table>

If you require assistance with travelling to the hospital please call the Patient Transport Bureau on 0300 7772131

THE HOSPITALS' RADIOLoGY DEPARTMENTS ARE NOT OPEN ON BANK HOLIDAYS
Q1) Mark, a 41 year old man, presents with cough for the past 6 weeks. He has smoked 20 cigarettes per day for 23 years - What further assessment should we make?

Q2) He is well, has a long standing morning cough with clear phlegm. Full examination is normal - What investigations would you request in primary care? What arrangement / safety net should we put in place for follow up?

Q3) CXR and FBC are normal but on review 1 week later he has experienced 2 episodes of haemoptysis - What action is required?
Breast Cancer

- The commonest cancer in the UK
- The incidence has risen by 7% in the last decade
- The lifetime risk of being diagnosed with breast cancer is 1 in 8 for women in the UK
The Australian singer was diagnosed with breast cancer in 2005. Minogue was misdiagnosed initially and told that she was healthy. She persisted in getting an accurate diagnosis and it was only after repeat investigations that her tumour was detected.

Sheila Hancock was diagnosed with breast cancer many years ago. She said "I actually detected mine quite early. I did it myself by regularly feeling my breast and discovering that something was slightly amiss. My instinct told me I needed to pursue it, which I did."
Q1) Sarah, a 38 year old lady presents with a history of having felt a lump in her left breast. It is painless, there is no history of trauma, she is not breastfeeding - What further assessment do we undertake and what signs should we look for?

Q2) There is a 1.5 cm breast lump in the upper outer quadrant of the left breast, there is no lymphadenopathy - What action should we take?

Q3) A 45 year old lady with a 2cm lump in the right axilla should be referred via the 2WW breast cancer pathway: True/False

Q4) A 51 year old lady with unilateral nipple discharge only should be referred via the 2WW breast pathway: True/False
- The commonest cancer in UK males
- The strongest risk factor for prostate cancer is age
- Men who have a family history of the disease in a 1st degree relative have an increased risk (2-3 times)

Q) Prostate cancer is commoner in Afro-Caribbean males: T/F ?

Q) Asian men have a lower risk of prostate cancer than white men: T/F ?
Alan’s story

78 year old man who was visited at home on 30/01 due to back pain

Pain thought to be muscular as it started immediately after patient lifted his bed. No red flags

Patient seen four times subsequently in the next 2 months for other problems (including a chest infection) but he did mention persistent back pain on these occasions (still no red flags)

Patient presented in secondary care with spinal cord compression on 18/03 – Metastatic disease T8-T12 seen on MRI. PSA markedly elevated
Prostate cancer – top tips

- Beware of recurrent presentations of back or pelvic pain, especially in men over 50 – is a PSA / DRE needed?
- Early prostate cancer can be asymptomatic
- Up to 15% of people with prostate cancer will have a normal PSA so if the DRE is abnormal, always refer (regardless of PSA)
- A new presentation of ED is a significant symptom & after discussion with the patient, a PSA & DRE may be appropriate
Q1) Tom is a 58 year old man who presents with LUTs - What further assessment should we undertake?

Q2) Examination of his abdomen is normal. PR reveals a smooth, moderately enlarged benign feeling prostate. Dipstick urine shows a trace of nitrite What do we do next? He is keen to have a PSA

Q3) His renal function and FBC are normal, PSA 10 (age specific range 0-4) MSU reveals an E. coli UTI. What action do we take?

Q4) PSA is now 3.9. MSU normal - What action should we take?

Q5) PSA is 5.4 after 3 months. MSU is normal & symptoms only slightly improved - What action should we take?

Q6) If you chose dutasteride as a treatment for his LUTs, what are the implications for PSA testing?
At least 100 people are diagnosed with colorectal cancer in the UK every day.

- The 4\textsuperscript{th} most common cancer
- Incidence risen by 6\% in the last decade
- Earlier diagnosis is essential
Colorectal Cancer – risk factors

- **Genetics** can increase risk

- 13% of bowel cancers are linked to being overweight

- **Alcohol** (1 unit / day) & **smoking** increase the risk

- **Diabetes & IBD** increase the risk

- High intake of **red meats & processed food** increases risk
Where possible, encourage screening uptake – it reduces mortality by **16%** (yet average uptake of FOB screening is just 58%!)

Be aware that patients who are at a high genetic risk or have IBD need to be in a surveillance screening programme.

Studies show abdominal pain is a significant symptom due to its PPV.

If you have a clinical suspicion, trust your instincts.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ 40 rectal bleeding with a COBH for 6 weeks</td>
<td></td>
<td>2WR</td>
</tr>
<tr>
<td>▪ 60 rectal bleeding for 6 weeks without COBH or anal sx</td>
<td></td>
<td>2WR</td>
</tr>
<tr>
<td>▪ 60 COBH 6 weeks without rectal bleeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ RIF mass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Palpable rectal mass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Men Fe deficiency anaemia Hb &lt; 110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Non-menstruating women Fe deficiency anaemia Hb &lt;100</td>
<td></td>
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</tr>
<tr>
<td>▪ &gt;40 unexplained weight loss &amp; abdo pain</td>
<td>2WR</td>
<td></td>
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<tr>
<td>▪ &gt;50 unexplained rectal bleeding</td>
<td></td>
<td>2WR</td>
</tr>
<tr>
<td>▪ &gt;60 Fe deficiency anaemia or COBH</td>
<td></td>
<td></td>
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<tr>
<td>▪ All ages with positive FOB/FIT</td>
<td></td>
<td></td>
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<tr>
<td>o &lt;50 rectal bleeding plus at least one of weight loss, COBH, abdo pain</td>
<td>Consider 2WR</td>
<td>2WR</td>
</tr>
<tr>
<td>▪ No rectal bleeding and</td>
<td>Test for blood in stool (FOB or FIT)</td>
<td></td>
</tr>
<tr>
<td>▪ &lt;50 abdo pain or weight loss</td>
<td></td>
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<tr>
<td>▪ &lt;60 COBH or Fe deficiency anaemia</td>
<td></td>
<td></td>
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<tr>
<td>▪ &gt;60 non Fe deficiency anaemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ Other symptoms</td>
<td>Safety Netting</td>
<td></td>
</tr>
</tbody>
</table>
Q1) Ken, a 62 year old man presents for a new patient diabetes review having seen the nurse 2 weeks previously. His diabetes was diagnosed 'opportunistically' following a CV Risk appointment. His BMI is 22, there is no FH of DM he asks if this would explain his recent weight loss (4kg in 5 weeks) and upper abdominal discomfort. What further assessment would you undertake?

Q2) He is not clinically anaemic or jaundiced and examination of his abdomen is normal - What action would you take?
Q1) Non-urgent upper GI endoscopy is appropriate in the following situations (T/F)

a) A 58 year old presenting with weight loss and dyspepsia. Examination of her abdomen is unremarkable and she is not clinically anaemic. F

b) 56 year old man with treatment resistant dyspepsia? T

c) 59 year old man with upper abdominal pain, anaemia (not iron deficient) and a normal examination? T

d) 40 year old male smoker with dysphagia for solids & a normal examination F

e) 60 year old lady with weight loss, upper abdominal pain, diarrhoea & normal examination F
But...there are still some quick wins!!

- NICE have given greater importance to GP-accessible tests, including:
  - FBCs - thrombocytosis in the presence of...
    1. Weight loss or nausea or vomiting or dyspepsia or reflux or upper abdominal pain, should prompt an OGD in those ≥55
    2. A patient who is ≥ 40 years old should prompt an urgent CXR
    3. Visible haematuria or vaginal discharge in women >55, should prompt consideration of a direct access TVUSS to exclude endometrial cancer (but don’t forget to also exclude urological causes if haematuria)!!
Quick wins (cont)...

- A raised WCC in the presence of...
  unexplained microscopic haematuria in ≥60, should prompt a 2WW referral to urology

- Haemoglobin
  - If ≥60 with any unexplained ID anaemia, refer via 2WW
  - If <50 with any unexplained ID anaemia AND PR bleeding, refer via 2WW
  - If ≥55 with a low Hb & visible haematuria in women, consider TVUSS (and potential urological causes)
Quick wins (cont)...

- **Blood Glucose**
  - If levels high in a woman with visible haematuria ≥55, consider TVUSS (and potential urological causes)
  - New onset diabetes in a patient 60 or over with weight loss should prompt an urgent abdo USS if CT unavailable

- **CA-125**
  - If ≥18 and CA-125 is ≥35, arrange an urgent TVUSS to exclude ovarian Ca

- **PSA**
  - Refer via 2WW if above age-specified reference range
Take home messages

- The new NICE guidance give you much more freedom to refer / investigate / use your clinical judgement
- There is a greater focus on symptoms and how they present in Primary Care
- Thrombocytosis is important! A number of small studies have suggested that up to 40% of people with raised platelets have cancer
- There is a greater emphasis on safety-netting & informing patients it’s a referral for suspected cancer
Tools & Resources to support GPs

- A downloadable version of NG12 can be found on the Macmillan Website

- CRUK have produced an interactive desk easel, summarising the guidelines based on symptoms (PDF format)

- Useful web resources include RCGP e-learning modules
Thank you for listening!