Direct Access Diagnostics

Transforming Cancer Services Team for London
1. Definitions & drivers
2. NICE diagnostic pathways
3. Rationale
   a. Managing cancer risk in primary care
   b. Improved productivity
   c. Improved outcomes
4. Implementation & enablers
5. Summary
PATIENT PRESENTS TO GP

RISK ASSESSMENT

HIGH RISK: Does the patient fit NICE Guidance criteria?

HOSPITAL HAS CLINICAL RESPONSIBILITY

URGENT OP APPOINTMENT

INVESTIGATION

ACTION AND FOLLOW UP BY CONSULTANT

2 WEEK WAIT REFERRAL

GP HAS CLINICAL RESPONSIBILITY
Clinical Pathways - Triage/Straight To Test

- **PATIENT PRESENTS TO GP**
  - **RISK ASSESSMENT**
    - **HIGH RISK**: Does the patient fit NICE Guidance criteria?
      - **YES**: **2 WEEK WAIT REFERRAL**
      - **NO**: **HOSPITAL HAS CLINICAL RESPONSIBILITY**

- **HOSPITAL HAS CLINICAL RESPONSIBILITY**
  - **TRIAGE**
  - **INVESTIGATION**
  - **URGENT OP APPOINTMENT**
  - **ACTION AND FOLLOW UP BY CONSULTANT**

**Straight to Test**: When a patient referred to outpatients is sent straight for investigation (usually after triage) rather than being seen in clinic first - if the investigation is normal they may be discharged without being seen.
PATIENT PRESENTS TO GP

RISK ASSESSMENT

HIGH RISK: Does the patient fit NICE Guidance criteria?

YES

DIRECT ACCESS INVESTIGATION

2 WEEK WAIT REFERRAL

POSITIVE RESULTS

CONSULTANT UPGRADE

NEGATIVE RESULTS

ACTION AND FOLLOW UP BY CONSULTANT

NO

DIRECT ACCESS INVESTIGATION

URGENT 2 WEEKS

DIRECT ACCESS INVESTIGATION

NON-URGENT

ACTION AND FOLLOW UP BY GP

LOW RISK: Patient does not fit NICE Guidance criteria

HOSPITAL HAS CLINICAL RESPONSIBILITY

GP HAS CLINICAL RESPONSIBILITY

GP HAS CLINICAL RESPONSIBILITY

DIRECT ACCESS: “When a test is performed and primary care retain clinical responsibility throughout, including acting on the result.” (NICE, 2015)
NATIONAL CANCER STRATEGY 2015 - 2020
RECOMMENDATIONS:

17: NHS England should mandate that GPs have direct access to key investigative tests for suspected cancer (blood tests, chest x-ray, ultrasound, MRI, CT and endoscopy) by the end of 2015.

24: Patients referred for testing by a GP, because of symptoms or clinical judgement, should either be definitively diagnosed with cancer or cancer excluded and this result should be communicated to the patient within four weeks. The ambition should be that CCGs achieve this target for 95% of patients by 2020, with 50% definitively diagnosed or cancer excluded within 2 weeks.
NICE GUIDANCE 2015

- Previous NICE Guidance (2005) had a ‘positive predictive value’ of diagnosing cancer of around 5% - this delivered a ‘conversion rate’ of 2WW referrals of around 10% over all cancers

- NG12 aims to lower the ‘positive predictive value’ of diagnosing cancer from 5% to 3% which will increase the number of patients requiring investigation and lower the conversion rate

- A number of diagnostic pathways involve direct access investigations
NICE QUALITY STANDARD 2016 (QS 124)

1. GPs have direct access to diagnostic endoscopy, ultrasound, MRI, X-ray and CT for people with suspected cancer
2. People presenting in primary care with symptoms that suggest oesophageal or stomach cancer have an urgent direct access upper gastrointestinal endoscopy
3. Adults presenting in primary care with symptoms that suggest colorectal cancer, who do not meet the referral pathway criteria, have a test for blood in their faeces
4. People with suspected cancer who are referred to a cancer service are given written information encouraging them to attend
These are the commissioning intentions relating to direct access investigations

<table>
<thead>
<tr>
<th>CI No</th>
<th>Direct Access Investigation</th>
<th>Quality Requirement</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>Gastroscopy</td>
<td>Urgent: Maximum 2 weeks by end of 16/17 Non-urgent: Maximum 6 weeks</td>
<td>NG12</td>
</tr>
<tr>
<td>2.1</td>
<td>Non-Obstetric Ultrasound</td>
<td>Urgent: Maximum 1 week by end of 16/17 Non-urgent: Maximum 2 weeks Report next working day</td>
<td>NG12</td>
</tr>
<tr>
<td>2.2</td>
<td>CA125 &amp; Transvaginal Ultrasound</td>
<td>Maximum 2 weeks by end of 16/17 Report next working day</td>
<td>NG12 &amp; pan London guidance</td>
</tr>
<tr>
<td>2.3</td>
<td>Chest x-ray &amp; x ray</td>
<td>Urgent: Same day investigation &amp; report</td>
<td>NG12</td>
</tr>
<tr>
<td>2.7</td>
<td>Abdominal CT Scan</td>
<td>Urgent: Maximum 2 weeks by end of 16/17</td>
<td>NG12</td>
</tr>
<tr>
<td>2.8</td>
<td>Brain MRI</td>
<td>Urgent: Maximum 2 weeks by end of 16/17</td>
<td>NG12</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Suspected Cancer</th>
<th>NG12 Pathways</th>
</tr>
</thead>
</table>
| Stomach Oesophageal                  | • NICE pathway is via URGENT DIRECT ACCESS upper GI endoscopy  
• NICE also recommends NON-URGENT DIRECT ACCESS upper GI endoscopy for some symptoms                                                                 |
| Pancreas                             | • NICE pathway is mostly via URGENT DIRECT ACCESS abdominal CT scan (except jaundice)                                                                 |
| Brain/CNS                            | • NICE pathway for brain/CNS cancers in adults is completely via URGENT DIRECT ACCESS brain MRI scan                                            |
| Lung                                 | • NICE pathway is mostly via URGENT DIRECT ACCESS chest x-ray                                                                                |
| Ovarian Endometrial                  | • NICE pathways are mostly via URGENT DIRECT ACCESS ultrasound scan                                                                           |
Direct Access to Abdominal CT Scans

London is starting from a low baseline for direct access

<table>
<thead>
<tr>
<th>London Direct Access Abdominal CT Scan</th>
<th>Matched to England Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Requests (2014/15)</td>
<td>2455</td>
</tr>
<tr>
<td></td>
<td>6858</td>
</tr>
</tbody>
</table>

Direct Access to Brain MRI Scans

Low rates of direct access investigations are linked to high referral rates

<table>
<thead>
<tr>
<th>London GP Direct Access Brain MRI Scan</th>
<th>London Brain/CNS 2WW Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number (2015/16)</td>
<td>England Average</td>
</tr>
<tr>
<td>4403</td>
<td>8568</td>
</tr>
<tr>
<td></td>
<td>1710</td>
</tr>
<tr>
<td></td>
<td>1283</td>
</tr>
</tbody>
</table>

Source: Diagnostic Imaging Dataset
Content

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Rationale for direct access investigations:

1. Local, regional and national expectations (see slides 6-9)

2. Improved management of cancer risk in primary care

3. Improved productivity
   a. Reduced outpatient demand
   b. Reduced bureaucratic burden of 2WW referrals

4. Improved outcomes
   a. Patient experience
   b. Earlier diagnosis
   c. Improved survival
Managing Cancer Risk In Primary Care

We expect GPs to manage risk on behalf of the health system using these tools.

These are the appropriate tools for higher risk patients – if we remove urgent direct access investigation then the GP options are very limited.
Improved Productivity: Impact Of NG12 Direct Access Pathways

- **Conversion Rate** 10%
  - 100 patients present to GP
  - 100 2WW referrals
  - 100 investigations
  - 10 Cancers

- **Conversion Rate** 5%
  - 200 patients present to GP
  - 200 2WW referrals
  - 200 investigations
  - 10 Cancers

- **Conversion Rate** 3%
  - 330 patients present to GP
  - 330 2WW referrals
  - 330 investigations
  - 10 Cancers
### Improved Productivity: Impact Of Direct Access Endoscopy & Abdo CT

**Low conversion rate for upper GI 2WW referrals**

**Large number of potentially avoidable 2WW referrals annually**

#### Upper GI Suspected Cancer (Gastro-oesophageal & Pancreatic)

**Diagnostic Pathway 2015/16 (Q3 & Q4 London Data)**

<table>
<thead>
<tr>
<th>2015/16</th>
<th>Total Upper GI 2WW referrals seen</th>
<th>Number of patients treated following a 2WW referrals</th>
<th>2WW conversion rate</th>
<th>Total number of patients treated from all routes - 31 day pathway</th>
<th>% of cancers diagnosed via 2WW referral</th>
<th>Potentially avoidable 2WW referrals if direct access upper GI endoscopy and abdominal CT are available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q3</strong></td>
<td>6,771</td>
<td>238</td>
<td>3.5%</td>
<td>568</td>
<td>41.9</td>
<td>6,533</td>
</tr>
<tr>
<td><strong>Q4</strong></td>
<td>6,297</td>
<td>247</td>
<td>3.9%</td>
<td>616</td>
<td>40.1</td>
<td>6,050</td>
</tr>
<tr>
<td><strong>Total Q3+Q4</strong></td>
<td>13,068</td>
<td>485</td>
<td>3.7%</td>
<td>1,184</td>
<td>41.0</td>
<td>12,583                                                                 <strong>6 months data</strong></td>
</tr>
</tbody>
</table>
Using London upper GI 2 week wait referral data
Data for Q3 & Q4 2015/16 annualised

Improved Productivity: Impact Of Direct Access Endoscopy & Abdo CT

26,136 patients present to GP

26,136 2WW referrals

26,136 investigations

970 Cancers

‘Conversion Rate’ 3.7%
Using London upper GI 2 week wait referral data
Data for Q3 & Q4 2015/16 annualised

**Positive Predictive Value 3.7%**

- 26,136 patients present to GP
- 26,136 direct access investigations
- 970 2WW referrals
- 970 Cancers

**‘Conversion Rate’ 100%**

- 25,166 non cancer patients

Potentially saved 2WW referrals/outpatient attendances
**Improved Productivity: Gastro-oesophageal Cancers Route To Diagnosis**

Increasing numbers from all routes
High proportion of diagnoses through GP referral

<table>
<thead>
<tr>
<th>Route To Diagnosis</th>
<th>2007-09</th>
<th>2013-15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Emergency Admission</td>
<td>1,682</td>
<td>15.3</td>
</tr>
<tr>
<td>GP Referral (all referrals)</td>
<td>7,342</td>
<td>66.6</td>
</tr>
<tr>
<td>Other Hospital Consultant</td>
<td>1,994</td>
<td>18.1</td>
</tr>
<tr>
<td>Direct Access Endoscopy*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barrett’s Surveillance*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11,018</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>1,208</td>
<td></td>
</tr>
</tbody>
</table>

*Changes made to the dataset with the 2nd NOGCA led to the introduction of two new options for source of referral, direct access endoscopy and Barrett’s surveillance

Source: National Oesophago-Gastric Cancer Audit  HQIP 2016
Gastro-oesophageal Cancers: Route To Diagnosis - 2 Week Wait Referrals

Nationally, high proportion diagnosed through 2WW referrals

Patients diagnosed 2013-15 in England & Wales

Priority of referral known for 12,892 patients

2,985 (23.1%) patients were referred through other routes

9,907 (76.9%) patients were referred through two week wait

45.6% of these patients had a cancer diagnosis made within 2 week

79.9% of these patients had a cancer diagnosis made within 28 day

Source: National Oesophago-Gastric Cancer Audit  HQIP 2016
Improved Outcomes: Treatment Intent By Source Of Referral

Patients diagnosed through direct access have a higher rate of treatment with curative intent.

### Treatment Intent By Source Of Referral

For Patients Diagnosed 2013-15 England & Wales

<table>
<thead>
<tr>
<th>Route To Diagnosis</th>
<th>Curative Intent</th>
<th>Palliative Intent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Barrett’s Surveillance*</td>
<td>95</td>
<td>80.5</td>
<td>23</td>
</tr>
<tr>
<td>Direct Access Endoscopy*</td>
<td>97</td>
<td>52.7</td>
<td>87</td>
</tr>
<tr>
<td>Other Hospital Consultant</td>
<td>1624</td>
<td>42.8</td>
<td>2168</td>
</tr>
<tr>
<td>GP Referral</td>
<td>5117</td>
<td>39.5</td>
<td>7829</td>
</tr>
<tr>
<td>Emergency Admission</td>
<td>463</td>
<td>17.1</td>
<td>2243</td>
</tr>
<tr>
<td>Total</td>
<td>7396</td>
<td></td>
<td>12349</td>
</tr>
<tr>
<td>Missing</td>
<td>555</td>
<td></td>
<td>840</td>
</tr>
</tbody>
</table>

Source: National Oesophago-Gastric Cancer Audit  HQIP 2016
Treatment with curative intent dramatically improves 1 year survival

<table>
<thead>
<tr>
<th>Tumour Type &amp; Treatment Intent</th>
<th>Oesophageal/Junctional</th>
<th>Stomach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Survived 1 year</td>
<td>% Survived 1 year</td>
</tr>
<tr>
<td>Curative Intent</td>
<td>73.9</td>
<td>78.4</td>
</tr>
<tr>
<td>Palliative Intent</td>
<td>29.2</td>
<td>25.7</td>
</tr>
</tbody>
</table>

Survival for oesophageal & junctional cancers treated with curative intent

Survival for stomach cancers treated with curative intent

Source: National Oesophago-Gastric Cancer Audit  HQIP 2016
Improved Outcomes: Diagnosis After Emergency Presentation

London may have more to gain as emergency presentation is above national average (upper GI cancers)

2013-15 England & Wales

Average for England & Wales = 13.7%

Source: National Oesophago-Gastric Cancer Audit  HQIP 2016
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Implementation: Enablers

For successful implementation:

1. Clinical/managerial leadership (primary and secondary care)
2. Clinical/managerial engagement (primary and secondary care)
3. Project planning/project management
4. Agreed clinical criteria
5. Customised investigation request forms
6. GP educational materials
7. Vetting/audit of requests
8. Feedback to users
Summary

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