National Optimal Lung Cancer Pathways

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Overview

• How NOLCP evolved

• How it relates to national guidance

• Pathways

• Implementation
Clinical Reference Groups

• Initially conceived as assurance groups
• Clinical advice to NHS commissioning board for strategic planning
• Developed into key delivery mechanism for specialised services
• Tasked by NHS England to provide lung commissioning guidance for whole of lung cancer pathway
• Now Clinical Expert Groups (CEG)
Lung Cancer Commissioning Guidance

- Key priorities for healthcare improvement
  • early diagnosis
  • reducing variation
  • living with and beyond lung cancer

- What to commission

- What to measure

- Approved by
  • Programme of Care Board (NHSE) 2015
  • Approved by the Clinical Panel (NHSE) 2016
  • requested nationally agreed pathway

2017/18 NHS STANDARD CONTRACT
FOR ACUTE, AMBULANCE, COMMUNITY AND MENTAL HEALTH AND LEARNING DISABILITY SERVICES (MULTILATERAL)-

SECTION B PART 1 – COMMISSIONING GUIDANCE FOR THE WHOLE LUNG CANCER PATHWAY

<table>
<thead>
<tr>
<th>Commissioning guidance No</th>
<th>Lung Cancer Whole Pathway (commissioned by CCGs and NHSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td></td>
</tr>
<tr>
<td>Commissioner Lead</td>
<td></td>
</tr>
<tr>
<td>Provider Lead</td>
<td></td>
</tr>
<tr>
<td>Period</td>
<td>2017/18</td>
</tr>
<tr>
<td>Date of Review</td>
<td>April 2018</td>
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</tbody>
</table>

1.0 Executive summary
Lung cancer is the leading cause of cancer mortality in England and the world. This is because it is common and the majority of people with lung cancer present late when treatment has a limited effect on mortality. Although tobacco smoking causes around 85% of lung cancers, well over half of people are ex-smokers or未曾 smoking.
Evidence Base

- NICE GLs and QS (8 in total)
- DH improving outcomes guidance
- DH cancer commissioning guidance
- Independent Cancer Taskforce strategy

1. Prevention and public health
2. Earlier diagnosis
3. Patient experience
4. Living with and beyond cancer
5. Investment in a high-quality, modern service
6. Commissioning, accountability and provision.
Cancer Taskforce Metrics

- Cancer Taskforce for CCG dashboard
  - Proportion with cancer diagnosis
    - 50% by 2 weeks and 95% by 4 weeks
  - Proportion diagnosed at stage 1 and 2
    - 62%
  - Proportion diagnosed via emergency admission route
  - 1-year survival 75%
- Proportion meeting cancer wait times 62d 85%
- Patient experience - CPES data
Implementation

• Regional Alliances to lead local delivery of ICT strategy

• CEG reports to the Cancer Clinical Steering Group chaired by the Clinical Director for Cancer

• Key role of CCSG is to support the Alliances

• £160 million cancer transformation funds from NHSE to support taskforce recommendations
Development of nationally agreed pathways

- Requested by Clinical Panel NHSE
- Draft by 8 clinicians
- Modified by CRG
- Consultation with all cancer networks, professional bodies and patient reps (supported by CRUK)
- Draft updated following comments
- Finalised by CRG
- Sent to stakeholders for endorsement

- Oct 15
- Jan 16
Pathways developed

- National Standard Clinical Pathway
- Optimal pathway (previously termed "aspirational")
- Direct to CT
- Triage
- Curative intent
- Direct to biopsy

- Update June 2017
Throughout pathway consider:
Supportive and palliative care
Smoking cessation
Research trials
Optimise PS
Early Pathway

Day -3-0

Maximum times

Day -3-0

Day 0-3

High clinical suspicion?

No

GP

Yes

Urgent or routine CXR

CT (reported before patient leaves dept. / within 24 hours) suspicious of lung cancer?

No

CT same day / within 72 hours

Yes

CT abnormal?

No

Yes

TRIAGE

Direct referral criteria (NICE)

NICE referral guidance
Mid Pathway

Day 0-3

Triage
(by radiology or respiratory medicine according to local protocol) Lung cancer suspected?

Yes

Direct biopsy option*

No

Day 1-5

Fast track lung cancer clinic. Meet LCNS.
Diagnostic process plan / diagnostic planning meeting prior to clinic
Treatment of co-morbidity and palliation / treatment of symptoms

Suitable for potentially curative treatment?+

Yes

Curative Intent Management pathway*
Test bundle requested at first OPA
Including at least: PET-CT and as required: detailed lung function and
cardiac assessment / ECHO.
Meet with LCNS and receive information.

No

Further investigation(s) indicated?

Yes

Will pathological diagnosis influence treatment and is potential
treatment appropriate to patient’s wishes?

Yes

Investigations to yield maximum diagnostic
AND staging information with least harm.
Results available within 3 days for subtype
and 10 days for molecular markers.

Clinical diagnosis or patient preference
means biopsy not required.

No

Full MDT discussion of treatment options

Lung cancer unlikely
Further management according to local protocol with options of
further management of CT findings by primary care or secondary care
(see separate detailed algorithm)
First treatment pathway

Day 21

Full MDT discussion of treatment options

Further investigation(s)?

Yes

Further discussion needed?

Yes

No cancer: Manage/discharge

Day 28

Follow-up Lung Cancer Clinic
Cancer Confirmed and treatment options discussed. Research trial considered. LCNS present

Day 33

OPA with treating specialist (within 3 working days)

Day 42

Day 62

Maximum times

First Treatment

<table>
<thead>
<tr>
<th>Specialist palliative care</th>
<th>Other palliative treatments</th>
<th>Chemotherapy</th>
<th>Radiotherapy</th>
<th>Surgery</th>
</tr>
</thead>
</table>

No

Further investigation(s)?

Yes

No
## Key waiting times in the NOLCP

<table>
<thead>
<tr>
<th></th>
<th>Range (days) for section of pathway</th>
<th>Waiting time target (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXR to CT</td>
<td>0 to 3</td>
<td>-3 to 0</td>
</tr>
<tr>
<td>Triage (when cancer suspected; clock starts)</td>
<td>0 to 3</td>
<td>0 to 3</td>
</tr>
<tr>
<td>First clinic</td>
<td>0 to 3</td>
<td>1 to 5</td>
</tr>
<tr>
<td>Time to full work-up</td>
<td>7 to 14</td>
<td>5 to 21</td>
</tr>
<tr>
<td>Additional tests after MDT (definitive diagnosis for Taskforce)</td>
<td>0 to 7</td>
<td>5 to 28</td>
</tr>
<tr>
<td>Time to treatment clinic</td>
<td>3 to 5</td>
<td>8 to 33</td>
</tr>
<tr>
<td>Time from treatment clinic to treatment</td>
<td>7 to 14</td>
<td>15 to 47</td>
</tr>
<tr>
<td>Total time from CXR to treatment</td>
<td>7 to 14</td>
<td>18 to 50</td>
</tr>
</tbody>
</table>
Triage
By respiratory physician with reported CT according to clinical and radiological features.
Lung cancer likely?

Yes
- Lung cancer pathway

No
- Non lung cancer pathway
- Respiratory condition requiring urgent appointment including other cancer?
  Yes
  - Non-urgent respiratory OPA Including management of pulmonary nodules
    - GP meets/communicates with patient. Still requires respiratory OPA?
      Yes
      - GP manages patient
      No
  No
  - Urgent non-respiratory condition?
    Yes
    - Urgent communication with GP or direct admission depending on condition found or suspected
    No
    - Ongoing symptoms / need for non-urgent respiratory OPA? Write to GP and patient
      Yes
      - Non-urgent respiratory OPA Including management of pulmonary nodules
      No
      - GP meets/communicates with patient. Still requires respiratory OPA?
        Yes
        - GP manages patient
        No
Lung cancer pathway


Lung cancer pathway

Non lung cancer pathway

Condition requiring urgent appointment including other cancer?

Yes

Non urgent condition?

Yes

Non urgent condition?

No

Manage in primary care or non urgent referral. Management of pulmonary nodules is included here.

GP manages patient

No

Refer for urgent clinic, admission or other fast track cancer referral

TRIAGE

By radiologist (with or without chest physician input) according to CT findings.

Lung cancer likely?

Yes

No

Condition requiring urgent appointment including other cancer?

No

Non urgent condition?

Yes

Manage in primary care or non urgent referral. Management of pulmonary nodules is included here.
Fast track lung cancer clinic ± diagnostic planning meeting / Diagnostic MDT
Meet lung cancer nurse specialist

Stage: Potentially T1-3 N0-2 M0 (N2 non-bulky; i.e. <3cm)
Or locally advanced; potential for radical RT?
May include selected patients with oligometastatic disease

Potentially fit enough for treatment with curative intent and willing to consider this?
(Ensure low threshold for proceeding with work up for curative treatment)

Patients with borderline fitness$ add:
• Preoperative rehabilitation
• Shuttle walk test / CPEX / ECHO
• Perfusion scan if required
• Early cardiology assessment for cardiac co-morbidity

All patients:
• Medical optimisation (incl. smoking cessation)
  • PET-CT (within 5 days)
  • Diagnostic and staging tests
  • Spirometry ±TLCO
• Complete all tests within 14 days
• Alert surgeons / clinical oncology

Full MDT Discussion of treatment options or further investigation

National Optimal Curative Intent Management Pathway
Direct to biopsy – lung biopsy, neck US, EBUS, bronchoscopy
Rationale

• Comply with current and future CWT
  – 62d nationally 75% v 85%
  – 50% by 2 weeks, 95% by 4 weeks

• Evidence that faster pathways result in better outcomes
  - RCT and non RCT
EBUS as first test vs. conventional overall survival

Rationale

• Comply with current and future CWT
• Evidence that faster pathways result in better patient outcomes
• Shorter time to diagnosis lengthens survival
  – lead time may improve treatment options if PS more favourable
  – PS very strongly correlated with
    • Prognosis
    • Access to treatment (all modalities)
    • Response to treatment
### PS and overall survival

**NLCA linked to HES**

<table>
<thead>
<tr>
<th>PS</th>
<th>Total</th>
<th>Died</th>
<th>%</th>
<th>HR</th>
<th>Adj HR*</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>5839</td>
<td>3804</td>
<td>64</td>
<td>1.0</td>
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<tr>
<td>1</td>
<td>9267</td>
<td>7226</td>
<td>78</td>
<td>1.49 (1.43 to 1.55)</td>
<td>1.28 (1.22 to 1.33)</td>
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<tr>
<td>2</td>
<td>5300</td>
<td>4737</td>
<td>89</td>
<td>2.50 (2.40 to 2.61)</td>
<td>1.87 (1.76 to 1.99)</td>
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<tr>
<td>3</td>
<td>3230</td>
<td>3103</td>
<td>96</td>
<td>4.51 (4.30 to 4.74)</td>
<td>3.12 (2.91 to 3.35)</td>
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<td>4</td>
<td>737</td>
<td>722</td>
<td>98</td>
<td>7.62 (7.03 to 8.25)</td>
<td>5.21 (4.39 to 6.17)</td>
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<tr>
<td>Missing</td>
<td>9992</td>
<td>8168</td>
<td>82</td>
<td>1.82 (1.75 to 1.89)</td>
<td>1.54 (1.45 to 1.62)</td>
</tr>
</tbody>
</table>

* Adjusted for age, sex, ethnicity, deprivation, comorbidity, stage, surgical centre, radiotherapy centre and trial entry centre

Rationale

• Comply with current and future CWT – Independent Cancer Taskforce report (50% by d14 and 95% d28)
• RCT evidence that faster pathways result in better outcomes
• Shorter time to diagnosis lengthens survival - lead time may improve treatment options if PS more favourable
• Reduce time from CXR to diagnosis potentially by 2-4 months
Chest x-rays prior to a diagnosis of lung cancer in general practice

Rationale

• Comply with current and future CWT – Independent Cancer Taskforce report
• RCT evidence that faster pathways result in better outcomes
• Shorter time to diagnosis lengthens survival - lead time may improve treatment options if PS more favourable; PS strong predictor of receiving treatment and survival
• Reduce time from CXR to diagnosis potentially by 2-4 months
• Reduce emergency admission diagnoses:
  – EM audit: most had primary care contact in preceding weeks; 50% of EA diagnosed referred in by primary care
NCIN Routes to Diagnosis

- Emergency: 35
- GP / 2WW: 49
- Other OP: 13
- Other: 3

NCIN 2015
Rationale

• Patient anxiety and experience
  – (nb speed v quality)
• Cost effectiveness – reporting radiographers; reduced interspecialty handover; reduced repeat scans
• Stratified management
  – avoid delays in complex pathways (curative intent)
  – divert those without cancer appropriately
• Supports evidence based commissioning guidance
Progress with implementation

• All elements working now at some hospitals
  – Liverpool
  – Nottingham
  – Manchester
  – London
• Bids for Alliance Transformation funding
62 Day Target Performance - 2016

- NUH Performance
- National Performance
- National Target
Local Implementation: NUH

- 5 workstreams
  - Admin
  - Tertiary
  - Referral
  - Diagnostics
  - Treatment

- CT pre triage +/- OPA
- Triage – 1/3 come off pathway (daily rota)
- CXR to CT – TAT 2-3 weeks to 7-10 days (aim 72h)
- Same day US neck
- OP lung biopsy not daycase
- ACE programme: direct to CT for normal CXR
Common challenges: advocacy

- Evidence based, guideline driven, wide consultation

- Supported by: CRUK, NHSE, Alliances

- April 2016 NOLCP included in quality indicators for Quality Assurance team

- April 2017 Service Guidance and NOLCP officially recognised by NHSE
Common challenges

- Cross specialty/ cross boundary

**Systematic and radical change**

**Multi faceted problem needs a multi faceted approach**

- ‘It’s the other specialties.’
- Leverage
- Patients
- ‘It’s too ambitious.’
“I fly to the moon,
I shrink the moon,
I grab the moon.”
THANKS A MINION!