National Cancer Diagnosis Audit and using Learning Events (SEA)

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Learning Events (SEA)

• For *individual and practice learning*
• Highlight areas for development as *Individual and Practice*
• Identify gaps/weaknesses *in systems*
• Stimulate discussion and *reflection as a group*
• Consider *particular types of presentation e.g emergency*
Factors influencing cancer survival and premature mortality
Updated NAEDI hypothesis

- **Age** / **Sex** / **Ethnicity** / **Socio-economic status**
  - Difficulty accessing primary care
    - Low public awareness / Barriers to help-seeking / Negative beliefs about cancer
  - Delays in primary care interval
    - Late presentation to a GP / Low uptake of cancer screening
  - Access to diagnostics and primary-secondary care interface factors
    - Late presentation to hospital services / Emergency presentations
  - Delays in secondary care interval
    - More advanced disease at diagnosis
  - Treatment Access to treatment Other factors
    - Poor survival rates / Premature mortality
    - Avoidable deaths

*New or changed since original hypothesis*
The role of primary care in cancer diagnosis via emergency presentation: qualitative synthesis of significant event reports

E D Mitchell*1, G Rubin2, L Merriman3 and U Macleod4
Understanding diagnosis of lung cancer in primary care:
qualitative synthesis of significant event audit reports
### Significant Event Audit of Cancer Diagnosis

**Cancer SEA Report Template**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis:</td>
<td></td>
</tr>
<tr>
<td>Date of diagnosis:</td>
<td></td>
</tr>
<tr>
<td>Age of patient at diagnosis:</td>
<td></td>
</tr>
<tr>
<td>Sex of patient:</td>
<td></td>
</tr>
<tr>
<td>Is the patient currently alive (Y/N):</td>
<td></td>
</tr>
<tr>
<td>If deceased, please give date of death:</td>
<td></td>
</tr>
<tr>
<td>Date of meeting where SEA discussed:</td>
<td></td>
</tr>
</tbody>
</table>

N.B.: Please DO NOT include the patient's name in any narrative

### 1. What Happened?

Describe the process to diagnosis for this patient in detail, including dates of consultations, referral and diagnosis. Consider for instance:

- The initial presentation and presenting symptoms (including where if outwith primary care).
- The key consultation at which the diagnosis was made.
- Consultations in the year prior to diagnosis and referral (how often the patient had been seen by the practice and for what reasons).
- Whether s/he had been seen by the Out of Hours service, at A&E, or in secondary care clinics.
- If there appears to be delay on the part of the patient in presenting with their symptoms.
Early Diagnosis of Cancer Significant Event Analysis Toolkit

Cancer SEAs prompt a GP to reflect on their diagnosis, and identify any potential improvements in practice systems using documentation or proactive safety netting.

At CCG or Health Body level, a cancer or quality improvement lead may find emerging themes and use local intelligence to address and manage issues. Cancer Significant Event Analysis (SEA) can support dialogue between the primary and secondary care interface and have benefits for clinicians, practices and patients.

Who is the toolkit for?

This cancer SEA toolkit and its resources support GPs, practice staff and commissioners in conducting high quality cancer SEAs with the aim of improving patient outcomes in the early diagnosis of cancer.

This toolkit may be used by CCG/Health Body or cancer leads, practice GP leads or any GP in practice delivering training and includes guidance for quality improvement across the primary secondary care interface.

If you are based in Wales or Scotland and interested in your practice taking part in the National Cancer Diagnosis Audit, please find out more and register here. Note that the audit in England has now closed.

- Training resources for cancer/commissioning leads
- Examples of SEAs with thematic analysis
- Resources and guidance for training practice staff
- Safety netting in primary care
- Additional cancer risk assessment tools
- Background and rationale
### Resources and guidance for training practice staff

The **Cancer SEA GP guide** can be used by any GP wishing to undertake a Cancer SEA. The guide can also be issued as a 'hand-out' for GPs in your training events.

**'Early Diagnosis of Cancer - Quality Improvement Using Cancer Significant Event Analysis' training session resources**

The following resources consist of a presentation that can be adapted for your training events, and resources to support this:

- Cancer SEA training slides with trainer notes
- Cancer SEA session - lesson plan
- Example cancer SEA session agenda

**Resources for training sessions:**

- Cancer SEA Template (2016)
- Instrument feedback tool
- Workshop brief
- Example SEA – Patient A handout
- Example SEA – Patient B handout
- Example SEA – Patient C handout
- Example evaluation form

### Safety netting in primary care
Learning Events (SEA)

SIGNIFICANT EVENT AUDIT OF CANCER DIAGNOSIS

Cancer SE Report Template

Diagnoses:

Date of diagnosis:

Age of patient at diagnosis:

Sex of patient:

Is the patient currently alive (Y/N)?

If deceased, please give date of death:

Date of meeting when SEA discussed:

N.D.: Please DO NOT include the patient's name in any narrative. Please anonymize the individual involved in the story by referring them as GP1, GP2, Nurse1, Nurse2, GP Reg1, etc.

1. WHAT HAPPENED?

Describe the process for diagnosis for this patient's disease. Include dates of consultations, referrals and diagnosis and the clinicians involved in that process. Consider for instance:

- The initial presentation and any symptoms or signs of disease.
- The delay (if any) in consultation at which the diagnosis was made.
- Calculations in the case of cancer staging and how the affected patient was seen by the practice for the first time. (This should include consultation dates, among others, also: GP1, GP2, Nurse1: see them, etc.).
- Whether the referral was made by the Outcomes from referral, at Age, or in secondary care clinics.
- What the referral or impact related to these referrals.

A gentleman with a hi, hypertension - good recovery expected for some issues of increased phlegm nasal mucus since his stroke. Had annual check at salubrity.


Ankle: and heel pain persisted.

Haddad asking around 1990.

Seems 21/04/2014 by GP1: - symptoms improved with above Rx. Still some postural d1 though and cough - referred to CRN. Systemically well in self, daughter feels he's improving. Chest was clear on exam again.

CRN: done 6/4/2014 CRN. Chest: Clinical History: dry cough - 652 pathology. CRN: Chest: the heart is normal. There is blunting of the right costophrenic angle, which may be chronic, but counterweights an emphysema. The lung is otherwise clear. 30.4.2014 patient invited for a review.

6/5 2014: seen by GP1: - well in himself - felt breathing had improved with emphysem. Chest expansion - no abnormality especially in base. Plan agreed with family to monitor and repeat CRN after a few months.

Seems 24 & 6/5: for minor surgical procedures, done by GP1: no complaints about breathing cough.

Seems 8/7 2014 by NCA: for routine annual blood test. Normal FBC and bone profile.

Seems 22.7.2014 by NCA: for annual eye exam and CKD review. Weighed herself, lost 4.5kg. No Hb noted. No report made of respiratory symptoms.

2. WHY DIDN'T HAPPEN?

Reflect on the process of diagnosis for the patient. Consider for instance:

- This was as good as it was possible to be.
- The actions that contributed towards inappropriate diagnosis or inappropriate care.
- How often is it that what one describes was seen before? Was there a review?
- Whether the patient's decision making was appropriate. Were the decision making factors appropriate.
- Whether the decision about diagnosis or care was correct.
- Whether the treatment plan was adequate to care for the illness.
- When the patient was reviewed.

In general assessment and treatments of symptoms, seems appropriate. Reference to CRN was also appropriate after the duration of the cough.

The CRN report wasn't alarming. The saw GP1 who focused on the lungs and HR base and found nothing abnormal. Clinically was improving too. So felt a reasonable review CRN after 4 months was a reasonable approach. Safety netting was mentioned in the record.

At the time the follow-up CRN was requested by GP1 in September 2014, he was developing progressive symptoms and was referred appropriately into hospital. Not of clear from the notes whether the patient did book an appointment for the CRN after this. However, he was ultimately admitted to hospital and a chest X-ray was taken. A large 4 cm effusion was seen and a diagnosis. No CRN follow-up arrangements recorded were for a large discharge and lack of contact. Lack of clear follow-up arrangements for a large discharge and lack of contact. Lack of clear follow-up arrangements for a large discharge and lack of contact. Lack of clear follow-up arrangements for a large discharge and lack of contact.
East Midlands Emergency presentation of lung cancer  SEA- Thematic Analysis

- Common themes
- Divided into:
  - Tumour
  - Person
  - System
  - Diagnostics
  - Primary Care
  - Secondary Care
Tumour Themes

- No symptoms
- Anaemia
- Weight loss
- Neurological features:
  - ataxia, arm/facial weakness, seizure
- Breathlessness
- Pain
- Recurrent COPD exacerbations in the 6 months leading to diagnosis
Person Themes

- Nihilism and reluctance to “bother” G.P
  - Seizure 4 months before
  - Haemoptysis, saw pharmacist
- Stoic attitude rarely attend G.P
- Attribution of symptoms to another problem
- Attend AE
- Declining further investigations
  - Abnormal CXR
- Slow to represent after Investigations
- Frail with comorbidity
Community Themes

- Understanding of NICE referral guideline criteria
  - What to do if CXR normal?
- Symptoms not always respiratory and meet criteria
- Pathway redesign
The Practices

Eastgate Medical Group

Church View Surgery

The Hedon Group Practice

Orchard 2000 Medical Centre

New Hall Surgery
Oakfield Court Cottingham Road
Key Lung Cancer Learning Point

• 37 (31%) patients had a first CXR which was negative for lung cancer

• A negative CXR significantly increased median time to diagnosis with a fivefold increase in time to referral

• A detailed review of cases showed that negative CXRs seemed to divert the GPs attention away from the possibility of lung cancer with multiple trials of treatments, routine referrals and referrals to other specialities being made.
<table>
<thead>
<tr>
<th>Learning point</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety netting is important when managing patients with red flag symptoms, arranging investigations and sending referrals</td>
<td>39</td>
</tr>
<tr>
<td>Know the NICE guidelines on the recognition and referral of cancer and the red flags</td>
<td>26</td>
</tr>
<tr>
<td>Have a robust system for dealing with the results of investigations</td>
<td>17</td>
</tr>
<tr>
<td>A careful examination should be undertaken and documented in patients presenting with abdominal symptoms</td>
<td>15</td>
</tr>
<tr>
<td>Patients presenting multiple times with similar symptoms should be monitored</td>
<td>6</td>
</tr>
<tr>
<td>Have a low threshold for investigating patients who present infrequently</td>
<td>6</td>
</tr>
<tr>
<td>Patients with significant comorbidities, may present late or have new symptoms labelled as part of their existing disease</td>
<td>6</td>
</tr>
<tr>
<td>Investigate patients with iron deficiency anaemia and know the local referral pathway</td>
<td>4</td>
</tr>
<tr>
<td>Good communication with secondary care can improve diagnosis times</td>
<td>3</td>
</tr>
<tr>
<td>Do not be reassured by normal blood results when a diagnosis of colorectal cancer is suspected</td>
<td>3</td>
</tr>
<tr>
<td>Ensure patient contact details are correct when organising investigations and referrals</td>
<td>2</td>
</tr>
<tr>
<td>Learning point</td>
<td>Frequency</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Safety netting is important when managing patients with red flag symptoms, arranging investigations and sending referrals</td>
<td>41</td>
</tr>
<tr>
<td>Have a low threshold for requesting chest x-rays, particularly in current or ex-smokers</td>
<td>34</td>
</tr>
<tr>
<td>Know the NICE guidelines on the recognition and referral of cancer and the red flags</td>
<td>22</td>
</tr>
<tr>
<td>Patients presenting multiple times with similar symptoms should be monitored</td>
<td>19</td>
</tr>
<tr>
<td>Have a robust system for dealing with the results of investigations</td>
<td>17</td>
</tr>
<tr>
<td>Be aware that chest x-rays can be negative even in patients with cancer</td>
<td>14</td>
</tr>
<tr>
<td>Patients presenting to A&amp;E or OOH should be monitored and reviewed as needed</td>
<td>11</td>
</tr>
<tr>
<td>Have a low threshold for investigating patients who present infrequently</td>
<td>9</td>
</tr>
<tr>
<td>A careful examination should be undertaken and documented in patients presenting with chest signs</td>
<td>7</td>
</tr>
<tr>
<td>Have a system in place to monitor investigations that have been requested and to chase up patients who do not attend</td>
<td>6</td>
</tr>
<tr>
<td>Good communication with secondary care can improve diagnosis times</td>
<td>6</td>
</tr>
<tr>
<td>Document and record smoking status in patients presenting with chest symptoms</td>
<td>3</td>
</tr>
<tr>
<td>Patients with significant comorbidities, may present late or have new symptoms labelled as part of their existing disease</td>
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CANCER AUDIT IN PRIMARY CARE

• GPs play a pivotal role in cancer early diagnosis, but there is no routine data collected on the primary care portion of cancer pathways at national level

• The National Cancer Diagnosis Audit (NCDA) seeks to bring together data from Cancer Registries and from primary care to fill this gap

• The NCDA gathers data about:
  • Interval length and number of consultations in primary care
  • Use of primary care led investigations prior to referral
  • Referral pathways for patients with cancer, incl. Eps
  • Avoidable delays (as judged by GPs)
BENEFITS OF NCDA

• Highlighting and evidencing good practice – *what do we do well?*
• Identifying diagnostic challenges at practice level – *where could we improve?*
• Enabling targeted quality improvement activity, leading to more efficient and effective pathways to diagnosis and improved patient experience and outcomes
• Demonstrating quality improvement for GP appraisal, revalidation and CQC inspection
• Strengthen local and regional cancer intelligence (at CCG and Alliance levels)
• Help Cancer Alliances and STPs in the development and delivery of transformed cancer services, and implementing cancer national policies and standards, such as 28 day FDS and 62 day CWT standard
• Large national dataset enables research, incl. into avoidable delays and pathways for patients with vague symptoms and rare cancers

A partnership with:
KEY FINDINGS – NCDA 2014 (ENGLAND)

• Data were representative of the national cancer incidence for 2014
• Most patients (72%) first presented at the GP surgery (or had a home visit)
• 74% of patients were referred to a specialist after only one or two consultations; approximately 52% were referred through the Two Week Wait route
• Primary care led investigations before referral were used in 45% of all patients
• Time from referral to diagnosis exceeded 28 days in 54% of patients
• For 44% of patients, there was evidence in the clinical record that safety netting had been used
• For one in five patients the GP considered there to have been an avoidable delay in the patient receiving their diagnosis

Swann et al. BJGP 2018: https://doi.org/10.3399/bjgp17X694169
KEY FINDINGS – NCDA 2014 (YORKSHIRE & HUMBER)

• Most patients (71%) first presented at the GP surgery (or had a home visit)
• 66% of patients were referred to a specialist after only one or two consultations; approximately 55% were referred through the Two Week Wait route
• Primary care led investigations before referral were used in 53% of all patients
• For one in three patients (34%) the GP considered there to have been an avoidable delay in the patient receiving their diagnosis
AVOIDABLE DELAYS

Delays could occur anywhere along the pathway:

• 12.7% occurred pre-consultation
• 49.1% occurred in primary care
• 38.2% occurred in secondary/tertiary care

One in three avoidable delays reported by GPs in the audit was linked to diagnostic tests
The audit provided opportunities for targeted review and reflective learning, identified avenues for quality improvement activity, generated detailed insights into pathways to cancer diagnosis, and provided a baseline for future audits of the impact of new cancer referral guidelines.

Participating practices received tailored feedback reports and several practices made changes and undertook quality improvement activities based on audit findings.

Most QI activity focused on:
- Referral behaviours
- Safety netting protocols
- Bowel screening uptake

CCG\(^1\) and regional reports were also made available were possible. \(^1\)CCG/regional reports were only issued for CCGs with data from 10+ practices.

Our audit revealed some interesting case studies and we are already starting to make changes to our practice systems.

The need for more robust questioning of symptoms and reporting of safety netting decisions and advice was acknowledged. We are also using written safety netting advice which is handed to patients.
PLANS FOR 2019 NCDA

• Insights from NCDA 2014 are being used to change the model for next audit
• Future audit to use near real-time data collection approach (start in April 2109)

Audit registration opens in Feb 2019 via online portal managed by PHE

Data collection begins with new cases being added each month

6-month interim reports issues to participating practices, CCGs and Cancer Alliances

One year of data complete

Tailored annual reports issues to participating practices, CCGs and Cancer Alliances


• Data for the next audit will be collected during 2019/20 to spread the burden throughout the year
• All practices will receive tailored feedback reports
• Alliance, STP and CCG reports can be provided if sufficient practices take part

A partnership with:
NATIONAL CANCER DIAGNOSIS AUDIT
HELPING YOU IMPROVE CANCER OUTCOMES

WHAT IS THE AUDIT ABOUT?
The National Cancer Diagnosis Audit (NCDA) looks at patient pathways from first presentation to cancer diagnosis to:
- provide urgently needed data on the contribution of primary care to cancer diagnoses, strengthening local, regional and national cancer intelligence
- better understand the use of primary care-led investigations and referral pathways
- inform delivery of best care for cancer patients
Repeated rounds of the audit allow monitoring of the impact of changes, and ongoing service improvement.

LOCAL AND REGIONAL LEVEL BENEFITS
- Understand existing good practice, and service pathway design capability
- Identify areas for support/action, including opportunities to improve pathways and outcomes by quality improvement and reducing variation
- Improve health outcomes
- Implement national policies, help transform services, especially for earlier cancer diagnosis
- Strengthen cancer commissioning capability and local intelligence to support capacity planning

HOW CAN ALLIANCES AND CCGs HELP?
- Raise awareness of the audit with local practices and encourage participation
- Provide clinical leadership to support the recruitment of GP practices and regular submission of data by practices
- Ensure the learning opportunities from the audit are fulfilled at a local and regional level
- Complement input from Cancer Research UK Facilitators and Macmillan GPs

WHAT WE’VE LEARNT SO FAR
- GPs refer promptly (79% of patients referred to a specialist after fewer than three consultations)
- Half of patients diagnosed as emergencies (49%) had seen their GP in the same episode of illness
- Average time from referral to communication of diagnosis was 32 days, with 54% of diagnoses taking longer than 28 days
- GPs felt that one in five patients (22%) had experienced an avoidable delay on their pathway, most due to investigations and waiting for results

HOW IT WORKS
We will provide a secure data collection platform.
GPs will register for the audit in early 2019, and from April will submit data on key dates, investigations, referrals and delay etc.
We will analyse the data, make tailored reports for practices, CCGs and Cancer Alliances (where possible), and support discussion of findings and service improvement planning and activity.
Information governance and data release requirements will be met.

WE OFFER...
- analysis of the data by PHE
- a tailored report for your practice and a quality improvement toolkit
- access to support from Cancer Research UK Facilitators and Macmillan GPs to review and discuss your results and plan quality improvement activity

Information governance and data release requirements will be met.

"I found the whole process incredibly easy and very informative... It is definitely worth doing and I am planning to do [it] again next year." - GP from Doncaster

"From their NCDA report, our local CCG found that many patients do not consult their GP with symptoms and instead self-refer to A&E... [and there is] late diagnosis of colorectal and lung cancers... [therefore] the CCG have decided to address the low levels of cancer awareness and screening, and to reduce the health inequalities around screening." - CRUK Facilitator