How not to miss a cancer: What can learning events (formerly SEA) tell us?

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Learning events (formerly SEA)

• For *individual and practice/PCN learning*
• Highlight areas for development *as individual and Practice*
• Identify gaps/weaknesses *in systems*
• Stimulate discussion and *reflection as a group/Network*
• Consider *particular types of presentation e.g emergency*
Difficulty accessing primary care

Delays in primary care interval

Access to diagnostics and primary-secondary care interface factors*

Delays in secondary care interval

Treatment
Access to treatment
Other factors
Learning Events (SEA) - Overview

• What happened and why?
• What was the impact on those involved (patient, carer, family, GP, practice)?
• How could things have been different?
• What can we learn from what happened?
• What needs to change?
Learning Events (SEA) – Key Points

• Title and date of the SEA discussion and subsequent events
• Date the event was discussed and the roles of those present
• A description of the event involving the GP(s) and other colleagues
• Reflections on the event in terms of knowledge, skills and performance
• Safety and Quality Improvement
Learning Events (SEA)- Key Points

• Communication, partnership and teamwork
• Maintaining trust
• What changes have been agreed for me personally and the practice team, roles and agreed timelines for action(s)
• Changes carried out and their impact?
• How could things have been different?
• What can we learn from what happened?
• What needs to change?
## A TOOLKIT FOR GENERAL PRACTICE

E Mitchell, G Rubin & U Macleod

### Improving diagnosis of cancer

### SIGNIFICANT EVENT AUDIT OF CANCER DIAGNOSIS

<table>
<thead>
<tr>
<th>Cancer SEA Report Template</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis:</td>
</tr>
<tr>
<td>Date of diagnosis:</td>
</tr>
<tr>
<td>Age of patient at diagnosis:</td>
</tr>
<tr>
<td>Sex of patient:</td>
</tr>
<tr>
<td>Is the patient currently alive (Y/N):</td>
</tr>
<tr>
<td>If deceased, please give date of death:</td>
</tr>
<tr>
<td>Date of meeting where SEA discussed:</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 it overlapped with 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 she 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.
1. WHAT HAPPENED?

Describe the process to diagnosis for this patient in detail, including dates of consultations, referral and diagnosis and the clinicians involved in that process. 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; for what reasons; the type of consultation held: telephone, in clinic etc.; and who - GP1, GP2, Nurse 1 - saw them).
- 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.
- What the impact or potential impact of the event was.

June 2014- Attended GP surgery concerned about aching right groin lump. GP1 referred to Surgeon for possible hernia. Surgeon diagnosed a few ‘a few shotty lymph nodes but no hernia’, which he didn’t think warranted a scan.¹

June 2014- Normal mammogram.

Nov 2014- Negative bowel cancer screening test.²

Dec 2014- Consultation with GP1 for Hypertension review and statin discussion for raised cholesterol, QRisk 19%.³

Feb 2015- Consulted with GP1 for weeping area in umbilicus. Diagnosed as Pyogenic Granuloma and cauterized with silver nitrate.

¹¹th April 2015 – Consultation with GP2 for aching in left lower leg 2d after long haul flight. No clinical signs of DVT and Wells score -1. Muscle strain thought more likely. Counselling for signs of DVT and advised to raise concerns at BP check the following week and if worse would need scan to exclude DVT.⁴
1. WHAT HAPPENED?

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

- The initial presentation and presenting symptoms (including where if out of 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; for what reasons; the type of consultation held: telephone, in clinic etc; and who - GP1, GP2, Nurse 1 - saw them).
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- If there appears to be delay on the part of the patient in presenting with their symptoms.
- What the impact or potential impact of the event was.
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
# Training resources for cancer/commissioning leads

## Examples of SEAs with thematic analysis

## 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

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## Safety netting in primary care
The role of primary care in cancer diagnosis via emergency presentation: qualitative synthesis of significant event reports

E D Mitchell, G Rubin, L Merriman and U Macleod

Research

Elizabeth D Mitchell, Greg Rubin and Una Macleod

Understanding diagnosis of lung cancer in primary care: qualitative synthesis of significant event audit reports
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 referral 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

Royal College of General Practitioners

The Ridings Medical Group
Caring for our community

Cancer Research UK
Presenting symptoms

- Loose stools
- Abdo pain
- PR bleeding
- WT Loss
- Anaemia
- Poor appetite
- Constipation
- Tenesmus
- Tiredness
- Back pain
- Incontinence
- Abdominal Mass
- Anal pain
- Nausea
- Vomitting
- Epigastric pain
- Blue discoloration in fingers
- Cough
- Falls
- Cold hands
- Parasthesia
- Generally unwell

Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)
A pie chart showing the referrals of patients diagnosed with bowel cancer

- 2ww colorectal
- Urgent colorectal
- Routine colorectal
- Private
- 2ww upper GI
- Emergency admission
- 2ww gynaecology

Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)
<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>
</tbody>
</table>
Presenting complaint

- Cough
- SOB
- Chest pain
- Increasing sputum
- Weight loss
- Loss of appetite
- Wheeze
- Haemoptysis
- Generally unwell
- Tiredness
- Night sweats
- Headache
- Dizziness
- Hoarse voice
- Abnormal bloods

Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)
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>
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</tr>
</thead>
<tbody>
<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>
<td>2</td>
</tr>
<tr>
<td>Ensure patient contact details are correct when organising investigations and referrals</td>
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</tr>
</tbody>
</table>

**Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)**
NATIONAL CANCER DIAGNOSIS AUDIT
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 – relevant for new GP Contract.
• Help in the development and delivery of transformed cancer services, and implementing cancer national policies and standards.
• Large national dataset enables research, incl. into avoidable delays and pathways for patients with vague symptoms and rare cancers.
NCDA 2014 (ENGLAND)

- 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 was an avoidable delay in the patient receiving their diagnosis.

Swann et al. BJGP 2018: https://doi.org/10.3399/bjgp17X694169
Impact – NCDA 2014

- The audit:
  - Provided opportunities for targeted review and reflective learning.
  - Identified avenues for quality improvement activity.
  - Generated detailed insights into pathways to cancer diagnosis.
  - Provides 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

- Regional reports were also made available were possible.

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.
In 2014, the National Cancer Diagnosis Audit (NCDA) combined primary and secondary care data for patients diagnosed with cancer to understand patient pathways to diagnosis and improve clinical care.

**Place of Presentation**
- At the GP surgery: 69% (67.5% nationally)
- GP home visit: 5% (4.7%)
- At A&E: 6% (6.9%)
- Outpatient appointment: 5% (5.5%)
- Other places: 6% (6.6%)*

*Note: e.g. out of hours, telephone consultation etc.

**Consultations**
- Fewer than 3 consultations: 61% (66.2%)
- 3 or more consultations: 24% (19%)

**Types of Investigations**
- Blood test: 34% (30.3%)
- Imaging: 17% (15.5%)
- Urinary test: 2% (1.1%)
- Endoscopy: 1% (1.4%)

**Types of Referrals**
- Urgent (Two Week Wait): 55% (61.8%)
- Urgent (Non-cancer): 4% (4.4%)
- Screening: 7% (7.3%)
- Emergency: 18% (16.5%)
- Private: 1% (1.1%)

Out of a total of 439 GP practices and 17,043 patients nationally, data was submitted by 30 GP practices from the East Midlands Cancer Alliance area.
EMERGENCY DIAGNOSES

Of those patients diagnosed through emergency routes (18%), the proportion of patients referred by different emergency routes was:

- **44% (44.8%)** NO PRIOR GP CONSULTATIONS
- **48% (47.9%)** PRIOR GP CONSULTATION(S)

Key Findings

<table>
<thead>
<tr>
<th>Emergency Route</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient self-referred</td>
<td>25% (25.5%)</td>
</tr>
<tr>
<td>Referred as emergency by GP</td>
<td>15% (15.3%)</td>
</tr>
<tr>
<td>Referred as emergency by GP previously during same episode of illness with test/referral arranged</td>
<td>23% (23.3%)</td>
</tr>
<tr>
<td>Referred as emergency by GP previously during same episode of illness but no test/referral arranged</td>
<td>25% (25.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>4% (4.4%)</td>
</tr>
</tbody>
</table>

AVOIDABLE DELAYS

Where avoidable delays occurred and the main reasons for the occurrence:

- **Breast** 50%
- **Colorectal** 49%
- **Lung** 64%
- **Prostate** 45%

Primary Care (51% (47.7%))

- **Appointment** (6% (7.0%))
- **Clinical Appraisal** (24% (19.0%))
- **Test requested/ performance** (20% (24.5%))
- **Test result/reporting** (10% (9.0%))
- **Delayed follow-up** (5% (6.9%))
- **Referral** (18% (16.1%))

Secondary/Tertiary Care (35% (37.1%))

- **Breast** 12%
- **Colorectal** 34%
- **Lung** 26%
- **Prostate** 52%

RCGP - Royal College of General Practitioners

Cancer Research UK
PLANS for 2019 NCDA (ENGLAND)

- Insights from NCDA 2014 have been used to change the model for next audit.
- Future audit to use **near real-time data collection** approach (start in April 2019).

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Audit registration opens in Feb 2019 via online portal</td>
<td>Data collection begins with new cases being added each month</td>
<td>Interim reports issued to participating practices</td>
<td>One year of data capture complete</td>
<td>Tailored annual reports issued to participating practices, CCGs and Cancer Alliances</td>
</tr>
</tbody>
</table>

- Data for the next audit in England will be collected during 2019/20.
- All practices will receive tailored feedback reports at 6 and 12 months.
Online registration for the next NCDA will open from February 2019
Data collection in England due to start from April 2019

How it works:

• GPs register online and will be given a secure account and password for the online NCDA portal which is linked to their practice.

• From April 2019 patients newly diagnosed with cancer registered at their practice will automatically appear on the portal once they are logged on the Cancer Registry; GPs will get a monthly email to alert them to new cases.

• For each patient GPs then submit data on key dates, symptoms, number of consultations, types of investigations, referral(s) and patient characteristics.

• Patients with certain characteristics will automatically be flagged by the system for further review / as a learning event (e.g. emergency diagnosis, those who died within 30 days of diagnosis etc.)

• Analyse the data and create tailored practice reports which will be shared via the online portal.

• Support from CRUK facilitators & Macmillan GPs, and resources from CRUK and the RCGP, are available to support discussion of audit findings and planning of quality improvement activity.

PLANS for 2019 NCDA (ENGLAND)
National Cancer Diagnosis Audit

Welcome to the National Cancer Diagnosis Audit, operationally managed by Cancer Research UK, and hosted by the National Cancer Registration and Analysis Service, Public Health England, in collaboration with the Welsh Cancer Intelligence and Surveillance Unit (Public Health Wales), NHS England, NHS Scotland, Macmillan and the Royal College of General Practitioners.

Helpful guides on how to use this site and how to add new users are available:

- How to complete and submit patient data
- How to add additional users from inside the portal
- How to assign patients to another user
- Patient flags, reflections and learning

While completing the audit you will be able to:

- Review your patient's record and submit primary care data
- Register other colleagues in the practice to support data collection
- Let us know about missing patients or patients incorrectly assigned to your practice

Please note: You can save any changes, sign out, and come back at any time to complete your patient's record.

While completing the audit, please be mindful of any diagnostic challenges and opportunities for quality improvement. These RCGP resources can help with clinical improvement activity and support from Cancer Research UK facilitators is also available.

Completed: 0
To do: 7

See My Patients
Add another user at this practice

In partnership with

Developed for Public Health England's National Disease Registration Service by Health Data Insight CiG
Patients for review

Below you can find patients from your practice that were recently diagnosed with cancer. You can review these patients by clicking on the review link next to each patient.

The changes you make can be saved as you go along by using the save options at the bottom of the patient review pages. So if you only have time to input some of the information, you can always go back and continue it.

A patient reflection form has been created to use as part of your GP appraisal, instructions on how to use this form are here.

You can choose to assign a patient to a specified user at your practice, e.g. the GP who looked after or referred this patient, by using the dropdown option on the right of the record. Note: you can only assign patients to fully registered users in the system that are associated with your practice and have passed PHE’s verification checks.

<table>
<thead>
<tr>
<th>Status</th>
<th>NHS Number</th>
<th>Surname</th>
<th>Forename</th>
<th>Diagnosis date</th>
<th>Age at diagnosis</th>
<th>Tumour type</th>
<th>Assigned To</th>
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<tbody>
<tr>
<td>Incomplete</td>
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<td>Melanoma</td>
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<td>Haematology (C81-C85)</td>
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<tr>
<td>Incomplete</td>
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<td>Ovary</td>
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<td>Breast</td>
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<td>Lung</td>
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<tr>
<td>Incomplete</td>
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<td></td>
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<td></td>
<td></td>
<td>Lung</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Female Gynae</td>
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</tr>
</tbody>
</table>

In partnership with

Royal College of General Practitioners
MACMILLAN CANCER SUPPORT
C CANCER RESEARCH UK
NHS England
FURTHER RESOURCES

• How to get involved with the NCDA
  https://www.cancerresearchuk.org/health-professional/diagnosis/national-cancer-diagnosis-audit

• Practice support from a CRUK Health Professional Facilitator
  https://www.cancerresearchuk.org/health-professional/learning-and-support/tailored-help-for-gp-practices

• Contact: pawan.randev@nhs.net
Resource

- Behind the headlines
Cervical cancer 'could become a thing of the past'

Wednesday February 20 2019

"Cervical cancer could be eliminated in most countries by 2100," reports The Guardian.

The headline is prompted by a new study that predicted what might happen to cervical cancer over the next 50 years.

Most cases of cervical cancer are caused by the human papillomavirus (HPV), and there are effective vaccines that can protect people from contracting HPV.

It's hoped that the number of cases of cervical cancer will be greatly reduced in countries where the vaccine is widely used.

But vaccination rates are much lower in poorer parts of the world.

Also, while vaccination protects young people who have never come into contact with HPV, it does not treat established infections.