The Clerk’s tale

A 47 year-old lady
Diabetic for several years, but otherwise well previously
Severe and worsening back pain for 4 months
Weight loss of 8 kg
Requiring morphine to sleep
7 visits to GP surgery over 3 months
CA125 measured and raised. Referred for imaging....
The usual responses:

Symptoms:
- Can't get GP appointment
- Next GP appointment
- Sent for blood tests
- Refer for opinion
- Wait for hospital appointment
- Sent for scan
- Return with scan results
- Refer for biopsy
- Operation cancelled
- Wait for histology result
- Return with biopsy result
- Refer for surgery

May 2014: "Latest figures show nationally the NHS has met and exceeded seven out of eight cancer waiting time standards. But there is variation in meeting the challenging standards and national performance against one of the targets has dipped..."

November 2014: "We're referring 51% more patients for cancer treatment than in 2010, and have invested £0.75bn in better early diagnosis and treatment to make progress towards our ambition to be the best country in Europe..."

March 2015: "We have invested an extra £750m on cancer services, including early diagnosis and innovative radiotherapy..."

November 2016: "Early and fast diagnosis is crucial in improving patient outcomes and experience. Getting pathology test results to patients quickly is a key part of this. That's why we have invested over £2.5bn on efficient and robust pathology services across the NHS..."
CANCER SURVIVAL IN THE UK HAS DOUBLED TO 50% IN THE LAST 40 YEARS. OUR AIM IS TO REACH 75% IN THE NEXT 20 YEARS.

Nearly 1000 people a day are diagnosed with cancer in the UK.
Compared to abroad?

LATEST CANCER SURVIVAL FIGURES
ENGLAND FIGURES COMPARED TO COUNTRIES WITH SIMILAR HEALTHCARE SYSTEMS

Early stage: better survival

The latest data show England continues to improve but still lagging behind many countries.


All Cancers


http://www.npsa.nhs.uk/resources/715483/012015/survival.pdf

improvement = 5.1% 5-year survival by stage at diagnosis

Improvement in the proportion of cancers diagnosed in stages 1 and 2
Why do we lag behind other Health Systems?

Findings from the International Cancer Benchmarking Partnership:

- As gatekeepers – the gate needs to be wider
- Outcomes closely linked to “readiness to act”
- Patients fear wasting GP time

62-year-old man with COPD, heavy smoker for over 40 years. Presented with respiratory symptoms

4 of 5 vignettes showed a statistically significant correlation (p<0.05 or better) between readiness to investigate or refer to secondary care at the first phase of each vignette and cancer survival rates


Primary Care could (should?) have a part to play throughout the cancer pathway, and is well placed to do so…if adequately resourced…
When it comes to recruiting for GP vacancies, three in ten GP partners (31%) have been unable to fill vacancies in the last 12 months.

- Workload is manageable and allows quality and safe care
- Workload is excessive and at times prevents quality and safe care
- Workload is excessive and significantly prevents quality and safe care
- None of the above

BMA GP survey 20.12.16

Breaking the diagnostic system...
In intention-to-treat analyses, colorectal cancer incidence in the intervention group was reduced by 23% (hazard ratio 0.77, 95% CI 0.70–0.84) and mortality by 31% (0.69, 0.59–0.82).
How has that been going?....

Least deprived CCGs

Most deprived CCGs

Trend over time

Maybe a ‘simple’ ultrasound or blood test could find early ovarian cancer?

Over 200,000 people, 11 years follow-up

CA125 vs TV Ultrasound vs No screening

No significant difference in overall mortality from ovarian cancers

Possible suggestion of lower mortality in outer years
When cells go bad...

Heterogeneous and complex....

Dr Josephine Bunch

Using various new mass spectrometry imaging techniques, the team led by Dr Bunch will develop a new way to map tumours in unprecedented detail – from the whole tumour to individual molecules in cells. The work could lead to new ways to diagnose and treat cancer.
The economic case for prevention and earlier diagnosis

Every £1 spent on smoking cessation saves £10 in lifetime health care costs and health gains**

<table>
<thead>
<tr>
<th>£ per case</th>
<th>Quit smoking</th>
<th>Stage 1</th>
<th>Stage 4</th>
<th>Pembrolizumab</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>220</td>
<td>7952</td>
<td>13078</td>
<td>29114</td>
</tr>
<tr>
<td>5000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


A multi-stage problem:

- Cancer is complex. Early cancer is probably not simpler. We have a poor grasp of the biology
- The maths of population screening are generally against us
- We have calibrated our healthcare system to try and stop people using it
- We have failed to train adequate numbers of the professionals we need
- We are wasting money on catching up with a struggling diagnostic service
A multi-modal attack

• More sophisticated biological understanding
  (don’t wait for the magic bullet)
• Shared ownership of the problem
  (patients, primary, secondary care)
• A radically different approach to diagnostic services
  (MDCs ?)
• A proper plan for workforce development
• ....this might even pay for itself in the long run.