Cancer and Data in the ‘New NHS’
May 2011

Di Riley, Director
Clinical Outcomes
Improving Outcomes: A Strategy for Cancer

January 2011
Alignment with NHS reforms

- ‘Improving outcomes: A strategy for cancer’ sets out how the future direction for cancer will be aligned with:
  - Equity and Excellence: Liberating the NHS
  - Healthy Lives; Healthy people
  - The new emphasis on:
    - Patient information and choice
    - Outcomes not process targets
    - Stronger commissioning
    - New arrangements for public health and local democratic legitimacy
“We can only be sure to improve what we can actually measure”

Darzi, High Quality Care for All, June 2008
Information will be central to the drive for better outcomes

- Increased patient choice – informed by reliable information on services and on outcomes
- Information Prescriptions partnership
- National Cancer Intelligence Network (NCIN)
  - data collection (e.g. stage; chemotherapy; date of recurrence)
  - making information available in appropriate formats for patients, clinicians and commissioners
“Our aspiration is that England should achieve cancer outcomes which are comparable with the best in the world”

“We believe that by 2014/15, 5000 additional lives can be saved each year. It is now for the NHS, working with PHE to deliver this ambition”

Note: The “additional 5000 lives” will require England to match the European average. Approximately 10,000 additional lives would be saved if England was to match survival achieved in Sweden (and Australia and Canada)
Avoidable deaths pa if survival in England = best in World

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Avoidable Deaths</th>
<th>Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>~2000</td>
<td>250</td>
</tr>
<tr>
<td>Colorectal</td>
<td>~1700</td>
<td>250</td>
</tr>
<tr>
<td>Lung</td>
<td>~1300</td>
<td>240</td>
</tr>
<tr>
<td>Oesophagogastric</td>
<td>~950</td>
<td>225</td>
</tr>
<tr>
<td>Kidney</td>
<td>~700</td>
<td>225</td>
</tr>
<tr>
<td>Ovary</td>
<td>~500</td>
<td>190</td>
</tr>
<tr>
<td>NHL/HD</td>
<td>370</td>
<td>180</td>
</tr>
<tr>
<td>Bladder</td>
<td>290</td>
<td>170</td>
</tr>
<tr>
<td>Pancreas</td>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

[NB Prostate has been excluded as survival ‘gap’ is likely to be due to differences in PSA testing rates.]
Data derived from Abdel-Rahman et al, BJC Supplement December 2009
Improving outcomes: Key Messages - 1

- Information & choice
- NAEDI
  - Public & GPs awareness campaigns
  - 1 year survival – indicator of progress
    - Proportion of cancers diagnosed at stages 1 and 2
    - Proportion of cancers diagnosed through emergency routes
    - GP usage of diagnostic tests
- Inpatient/emergency admissions
  - Reduced LOS (save >£200m pa)
  - Enhanced recovery
  - 23hr breast models
- Better treatments
  - Chemotherapy/radiotherapy
Outcomes not Targets
- GFoCW
- recurrence/metastatic information

Quality Services
- Peer Review – reduce burden by 40% (CQC)
- MDTs
- National Audits
- Advanced comms. & Holistic needs assessments

NCIN role to focus on:
- Information for knowledge (outputs)
- Data for information (inputs)
Improving outcomes: Commissioning

- Cancer commissioning complex
  - NHS Commissioning Board (specialised services)
  - GP consortia and local health and well-being boards

- Stronger commissioning supported by NICE quality standards
  - lung starting soon!

- NCAT/NCIN will work with networks and GP consortia (pathfinders)
  - to develop commissioning support packs

- Cancer networks to be funded during the transition
## GP Practice Profiles for Cancer

### Cancer Indicators in [X48083] Dr Smith's Surgery, Another PCT (XXX)

These profiles provide comparative information for benchmarking and reviewing variations as a General Practice benchmark. They are intended to help primary care teams choose practice and service delivery in cancer and, in particular, early detection and diagnosis. They are not for the purpose of performance management and there are no "right or wrong" answers.

### Practice population (2018/19): 10,121

PCT population (all practices): 110,907

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicator (Rate or Proportion in brackets)</th>
<th>Practice indicator value</th>
<th>Practice indicator rate or proportion</th>
<th>Lower 95% confidence limit</th>
<th>Upper 95% confidence limit</th>
<th>PCT mean</th>
<th>England mean</th>
<th>Lowest practice</th>
<th>Range</th>
<th>Highest practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Practice Population aged 65+ (% of population in this practice aged 65+)</td>
<td>1490</td>
<td>14.8%</td>
<td>14.1%</td>
<td>15.5%</td>
<td>17.0%</td>
<td>15.6%</td>
<td>10.1%</td>
<td>24.7%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Socio-economic deprivation, &quot;Quintile 1&quot; affluent (% of population income deprived)</td>
<td>1569</td>
<td>16.6%</td>
<td>15.8%</td>
<td>20.4%</td>
<td>19.7%</td>
<td>19.9%</td>
<td>10.2%</td>
<td>32.8%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>New cancer cases (Crude incidence rate new cases per 100,000 population)</td>
<td>51</td>
<td>564</td>
<td>375</td>
<td>963</td>
<td>594</td>
<td>412</td>
<td>235</td>
<td>273</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cancer deaths (Cancer mortality rate deaths per 100,000 population)</td>
<td>25</td>
<td>237</td>
<td>106</td>
<td>376</td>
<td>278</td>
<td>230</td>
<td>66</td>
<td>503</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Preventable cancer cases (% in practice population on practice cancer registers)</td>
<td>156</td>
<td>1.0%</td>
<td>1.3%</td>
<td>1.8%</td>
<td>1.1%</td>
<td>1.3%</td>
<td>0.3%</td>
<td>2.1%</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Women, 30-64, screened for breast cancer in at least 3 months (1 year coverage)</td>
<td>537</td>
<td>70.1%</td>
<td>67.4%</td>
<td>72.0%</td>
<td>71.5%</td>
<td>71.3%</td>
<td>48.7%</td>
<td>79.6%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Women, 50-70, screened for breast cancer within 6 months of invitation (uptake, %)</td>
<td>13</td>
<td>25.9%</td>
<td>17.7%</td>
<td>43.4%</td>
<td>45.5%</td>
<td>74.3%</td>
<td>0.0%</td>
<td>77.4%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Women, 25-64, attending cervical screening within target period (3.5 or 5.5 year coverage, %)</td>
<td>1964</td>
<td>93.2%</td>
<td>73.6%</td>
<td>81.8%</td>
<td>78.3%</td>
<td>75.4%</td>
<td>95.0%</td>
<td>63.5%</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Women, 62-64, screened for bowel cancer in last 5 years (2.5 year coverage, %)</td>
<td>541</td>
<td>54.6%</td>
<td>51.7%</td>
<td>57.0%</td>
<td>51.6%</td>
<td>40.2%</td>
<td>35.3%</td>
<td>59.0%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Women, 65-69, screened for breast cancer within 6 months of invitation (uptake, %)</td>
<td>202</td>
<td>82.2%</td>
<td>65.4%</td>
<td>64.6%</td>
<td>56.8%</td>
<td>66.1%</td>
<td>40.4%</td>
<td>64.1%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Two-week wait referrals (Number per 100,000 population)</td>
<td>162</td>
<td>1861</td>
<td>1384</td>
<td>1827</td>
<td>1417</td>
<td>1619</td>
<td>157</td>
<td>2500</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Two-week wait referrals (Number per 100,000 population. Age standardised)</td>
<td>162</td>
<td>100.0%</td>
<td>85.0%</td>
<td>117.7%</td>
<td>n/a</td>
<td>100.0%</td>
<td>10.8%</td>
<td>165.6%</td>
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<tr>
<td>13</td>
<td>Two-week wait referrals with cancer (Conversion rate: % of all TWW referrals with cancer)</td>
<td>24</td>
<td>14.8%</td>
<td>10.2%</td>
<td>21.1%</td>
<td>14.5%</td>
<td>11.2%</td>
<td>5.7%</td>
<td>50.0%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Number of new cancer cases treated (% which are TWW referrals)</td>
<td>45</td>
<td>50.0%</td>
<td>35.4%</td>
<td>63.6%</td>
<td>44.5%</td>
<td>42.9%</td>
<td>12.5%</td>
<td>85.7%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Two-week wait referrals with suspected breast cancer (Number per 100,000 population)</td>
<td>47</td>
<td>464</td>
<td>341</td>
<td>818</td>
<td>359</td>
<td>329</td>
<td>0</td>
<td>702</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Two-week wait referrals with suspected lower GI cancer (Number per 100,000 population)</td>
<td>37</td>
<td>375</td>
<td>268</td>
<td>515</td>
<td>270</td>
<td>251</td>
<td>0</td>
<td>771</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Two-week wait referrals with suspected lung cancer (Number per 100,000 population)</td>
<td>7</td>
<td>69</td>
<td>28</td>
<td>143</td>
<td>70</td>
<td>68</td>
<td>0</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Two-week wait referrals with suspected skin cancer (Number per 100,000 population)</td>
<td>12</td>
<td>98</td>
<td>47</td>
<td>182</td>
<td>146</td>
<td>289</td>
<td>0</td>
<td>505</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Pre-invasive or early case colonoscopy procedures (Number per 100,000 population)</td>
<td>103</td>
<td>101.8</td>
<td>631</td>
<td>1234</td>
<td>877</td>
<td>513</td>
<td>302</td>
<td>1416</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Pre-invasive or early case sigmoidoscopy procedures (Number per 100,000 population)</td>
<td>40</td>
<td>345</td>
<td>202</td>
<td>500</td>
<td>324</td>
<td>300</td>
<td>55</td>
<td>602</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Pre-invasive or early case upper GI endoscopy procedures (Number per 100,000 population)</td>
<td>134</td>
<td>324</td>
<td>1100</td>
<td>1598</td>
<td>1304</td>
<td>989</td>
<td>729</td>
<td>2395</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Number of emergency admissions with cancer (Number per 100,000 population)</td>
<td>40</td>
<td>474</td>
<td>350</td>
<td>829</td>
<td>630</td>
<td>601</td>
<td>230</td>
<td>1122</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Number of emergency admissions with cancer (Number as % of presentations)</td>
<td>4</td>
<td>14.3%</td>
<td>5.7%</td>
<td>31.6%</td>
<td>31.7%</td>
<td>23.7%</td>
<td>12.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Number of managed referrals presentations (% of presentations)</td>
<td>19</td>
<td>84.3%</td>
<td>45.5%</td>
<td>70.3%</td>
<td>46.6%</td>
<td>48.3%</td>
<td>0.0%</td>
<td>87.8%</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Number of other presentations (% of presentations)</td>
<td>8</td>
<td>21.4%</td>
<td>12.2%</td>
<td>30.5%</td>
<td>19.4%</td>
<td>27.7%</td>
<td>0.0%</td>
<td>50.0%</td>
<td></td>
</tr>
</tbody>
</table>
Improving outcomes: Quality of life and patient experience

- Strategy builds on existing initiatives including:
  - The Advanced Communication Skills Training Programme (Connected)
  - The information prescriptions partnership
  - The National Cancer Survivorship Initiative
  - The Cancer Patient Experience Survey
  - New modeling on costs/benefits of one-to-one support

- Results of the cancer patient experience survey can be used to incentivise improvements
  - An aggregate score will be derived for each Trust

- Patient Related Outcome Measure (PROMs) will be piloted for cancer survivors

- New tariffs will be developed to incentivise better ‘aftercare’ for cancer patients
National support for implementation

• National Cancer Director post to remain
• Implementation Advisory Group established
• NCAT, NHS Improvement and NCIN will
  • support the implementation of strategy phase 1
  • future arrangements remain to be determined.
• Annual reports on progress will be published
Funding the new strategy

- An economic impact assessment published
- Government committed >£750m over the Spending Review period to achieve the strategy outcomes set out
- The main areas requiring increased expenditure will be:
  - Public awareness campaigns
  - Increased access to diagnostics for GPs
  - Flexible sigmoidoscopy screening
  - Increased use of surgery as more patients present with operable disease
  - Radiotherapy (including proton beam therapy)
- Most of increased expenditure offset by savings on I/P care
- The £750m does not include the £200m for the Cancer Drugs Fund
Alignment to the ‘5 Domains’

- Preventing Mortality
  - NAEDI

- Long Term Conditions
  - Survivorship (inc rehab workforce)

- Recovery from Ill-health
  - Transforming I/P care

- Patient Experience
  - Advanced comms. & Holistic needs assessments
  - MDTs

- Safety
  - RT, chemo, acute oncology
  - Peer Review, IOG implementation
Cancer Registration - Vision

• To provide ‘timely’ comprehensive
  • data collection and quality assurance
  • over the entire cancer care pathway
  • all patients treated in England (& UK)

• Resource for
  • patient care, treatment variations
  • quality, safety and performance management
  • audit, research and outcome analyses

• Increased focus on:
  • Stage, radiology, standard datasets, timeliness
Modernisation of Cancer Registration

• By 2013 all 8 English Cancer Registries to be using one single database system:
  • Reduce duplication
  • Data along patient pathway (inc rec/mets)
  • Using national data feeds e.g. GFoCW, HES, RTDS
  • Local data supplements e.g. MDTs, pathology
  • Increased timeliness
  • Regular ‘progress’ reports to MDTs/trusts
Registry Staging completeness - 2007

Cancer registry

- England
- North West Cancer Intelligence Service
- Trent Cancer Registry
- South West Cancer Intelligence Service
- Oxford Cancer Intelligence Unit
- Northern and Yorkshire Cancer Registry and Information Service
- West Midlands Cancer Intelligence Unit
- Thames Cancer Registry
- Eastern Cancer Registration and Information Centre

Percentage of cases with staging data

Source: National Cancer Intelligence Network
This report shows the completeness of certain key data items received each month by a Trust as discussed at MDT. By clicking on your Trust from the map above all the relevant data will appear on the performance chart to the right. You can compare your Trust to another by holding the Ctrl button and selecting another Trust. You can scroll the data down on the right hand side by hovering over the data and using the mouse wheel or holding the scroll bar (far right) and moving down/up. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.
This report shows the total number of pathology records received each month by a Trust. By using the data selector table (above and to the left of the report), these data can then be viewed by the Number of Unique Patients, the Number of New Registrations created from these data and the amount of New Tumours created by tumour group. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.
This report shows the total number of patients discussed at an MDT each month by each Trust (after certain normalisation of the data has been completed). By using the data selector table (above and to the left of the report), these data can then be viewed by site specific MDT. Please refer to the Tumour Groupings on the index page for more accurate understanding of the tumours currently being assessed. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.
2009 Lung Cancer Patient Pathway
Focus for us all:

• New NHS/PHE infrastructure
• New commissioning arrangements
• Improving Outcomes: A Strategy for Cancer
  • Outcomes agenda – new analyses
  • Standard datasets
  • Improved timeliness of data & reporting
  • Shared ‘data’ ownership
Thank you
Any Questions