More and more organisations are looking to deploy Electronic Document Management (EDM) Systems, why is this happening now, what are the business drivers?

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My Background

• Clinical Scientist – Medical Physicist for 16 years working in London, Yorkshire & Portsmouth

• General Management – General Manager / Operational Director for 6 years working for Portsmouth Hospitals leading the Clinical Support and Women’s & Children Divisions

• ICT – Programme Manager / Director of ICT of the Island & Portsmouth Health ICT Service for 6 years
Portsmouth Hospitals – essential facts

• Largest non-teaching Trust in England, serving a population of more than 550,000
• 1200+ beds on 3 main sites
• Turnover £364 million in 2006/07, 6000 wte staff
• 115,000 I/Ps, 450,000 O/Ps, 125,000 A+E attendances
• Cancer centre, regional services
• Key Issues – PFI valued at £240 million at financial close, and Foundation Trust Application
• Cost Improvement Programme - totalling £69 million by 2015/16
Portsmouth Hospitals – essential facts
Scope of Presentation

- Replacing the traditional paper health record
- Not addressing EDM in other areas although many obvious applications
Dispelling Myths – Why is EDM needed

More and more clinical information is collected and available electronically. Won’t the traditional paper health record just wither away over time?

• Danger of dual systems
• It varies between specialties but some old data is very important
• In my opinion electronic systems for collecting clinical data effectively and efficiently in all clinical situations are insufficiently developed, temporary paper is required
Dispelling Myths – CRS will provide

- CRS does not address the historical paper record issue. EDM is an additional bundle.
- Programme was already late and embroiled in contract reset before Fujitsu’s exit.
- CRS programme has been suspended since last autumn in Portsmouth, Isle of Wight & SE Hampshire.
- Plans B, C, D, etc. under active consideration.
- Maintained active local clinical information system development programme.
Why EDM & Why Now?

• Problems with Paper
  – Clinical
  – Paper Management
  – Security

• Potential Benefits of EDM

• Why Now?
Problems with Paper - Clinical

- Misfiling of documents
- Documents never filed
- Records lost
- Multiple records

Diagram: Duplicate Casenotes (SE Hants)

- Other
- C&B
- MH
- PHT

2007-08
Problems with Paper - Clinical

- Misfiling of documents
- Documents never filed
- Records lost
- Multiple records
- Specialty notes
- Time taken to find relevant information

All adds up to clinicians having to make clinical decisions based on incomplete information
## Records Related Incidents reported Jan. to Dec. 2007

<table>
<thead>
<tr>
<th>Incident</th>
<th>Count</th>
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<tbody>
<tr>
<td>Documentation Misfiled</td>
<td>57</td>
</tr>
<tr>
<td>Documentation Delay</td>
<td>28</td>
</tr>
<tr>
<td>No access to Documentation</td>
<td>56</td>
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<tr>
<td>Failure to include relevant information</td>
<td>6</td>
</tr>
<tr>
<td>Record mislabelled</td>
<td>2</td>
</tr>
<tr>
<td>Missing, inadequate or illegible information</td>
<td>12</td>
</tr>
<tr>
<td>Patient incorrectly identified</td>
<td>32</td>
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<tr>
<td>Records missing</td>
<td>18</td>
</tr>
<tr>
<td>Delay in receiving test results</td>
<td>4</td>
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<tr>
<td>Other Record Problem</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
</tr>
</tbody>
</table>
Problems with Paper Clinical

In attempting to arrive at the truth, I have applied everywhere for information, but in scarcely an instance have I been able to obtain hospital records fit for any purposes of comparison. If they could be obtained, they would enable us to decide many other questions besides the one alluded to. They would show subscribers how their money was being spent, what amount of good was really being done with it, or whether the money was not doing mischief rather than good.

Florence Nightingale, 1873
Problems with Paper – Paper Management

- Filing and retrieving of paper records
- Policies for Retention & Disposal
- Health & Safety
- Space
- Transport
- Multiple stores
- Cost
Problems with Paper - Security

- No auditing of who has viewed record
- Records left in insecure areas
- Difficult to control access
- Records physically lost
Potential Benefits of EDM – Clinical
(as integrated part of electronic patient record strategy)

• Information available when required
• Available simultaneously in multiple places
• Electronic records are more complete
• Research
• Future – better structured to aid care pathways and decision support

“Physicians in our study who used a CPR produced more complete documentation and documented more appropriate clinical decisions, as judged by an expert review panel.”

Why now?

- Situation with dual systems is getting worse – with combination of paper and multiple electronic systems
- Technology now has the capacity in terms of storage, processing power and display capability to support EDM for health records
- Technology still has a way to go – portable devices, data input methods

Must not consider EDM in isolation but as part of an overall strategy. The Portsmouth EDM business case was agreed simultaneously with a single sign-on and context switching business case.
Why Not Now? – The Risks

• Implementation Risks:
  – Infrastructure,
  – HR issues with many A+C staff roles affected,
  – etc.

• Clinical Acceptance

• Impact on Clinical Throughput

• Security
Conclusion

• There are pressing reasons for investing in EDM now

• This is despite the fact that implementation is complex and large risks have to be managed