Digital Clinical Communication (DCC) – Health Economic Findings of the LYNC study

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FaceBook: LYNCS2014

@LYNCStudy
Aims of LYNC HE Sub-study

• Estimate the direct costs associated with DCC use across sites

• Identify ways in which DCC creates value for young people, and quantify this value.

• Describe pathways through which DCC can lead to improvements in health, wellbeing and clinic efficiencies.
Sources of data

• HE Questionnaire on DCC time and equipment completed by 109 staff across 17 sites (61% completion rate).

• 110 young people answered a question on their willingness-to-pay for a DCC-enhanced service.

• HE follow-up interviews with senior clinician at 9 sites.

• Analysis of qualitative data from main study.
Results of questionnaire

Median: 45 minutes
Maximum: 9 hours
Rarely / never: 32 (29%)
> 2 hours: 24 (22%)
Sources of variation

• Median time per staff member at each site varied from 0 to 113 minutes per day, with no clear relationship with condition.

• Consultant grade staff spent considerably less time using DCC:
  – Grade 6/7 mean time 100 minutes per day (N=43)
  – Grade 8 mean time 70 minutes per day (N=19)
  – Consultant mean time 12 minutes per day (N=26)
## Site-level costing analysis

<table>
<thead>
<tr>
<th>Site code</th>
<th>Condition</th>
<th>No of staff</th>
<th>Staff cost</th>
<th>Equipment cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK04</td>
<td>Cancer</td>
<td>5</td>
<td>2920</td>
<td>97</td>
<td>3017</td>
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<tr>
<td>CSW06</td>
<td>MH</td>
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<td>9230</td>
<td>330</td>
<td>9560</td>
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<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>135</td>
<td>26</td>
<td>161</td>
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<tr>
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<td>Cancer</td>
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<td>6090</td>
<td>267</td>
<td>6358</td>
</tr>
</tbody>
</table>

Equipment costs are a minor component of total DCC costs (3-5%)
Young person valuation of DCC

Where a value of £0 was reported, this sometimes reflected an objection to being charged for this service.
Impact of DCC on costs

• DCC led to some efficiencies, particularly around DNAs
  – Opportunity costs depend on DNA impact on clinic.
• DCC could reduce need for clinic visits in relation to routine activities (csw01 estimate: 8-12 visits per user per year).
• Overall, respondents felt that DCC increased burden on staff:
  – Greater engagement, particularly with hard-to-reach groups
  – Barriers to contact lowered, so young people communicated more
  – Expectations around promptness of response.
  – Some of this workload was managed outside working hours.
Benefits of DCC

• Route to health benefits of DCC – richer, more frequent communication
  – Young people more likely to engage and sustain contact
  – Acute adverse events avoided or ameliorated
  – Long term prognosis improved

• Benefits to young people go beyond health
  – Anxiety, loss of control, uncertain prognosis, complex management.
Findings relevant to economic evaluation

• Distinguish between specific interventions with a DCC component, and DCC used in routine care.
• DCC may well increase, not decrease, staff workload and pressure on clinics working with young people.
• DCC may lead to substantial health benefits and savings for health services (but not necessarily for the clinic itself).
• Benefits of DCC to young people beyond health are valuable.
• Key impacts (staff time, non-health benefits, long term impacts) can be hard to measure.
Collaborating Organisations:
University of Warwick, King’s College London, University of Oxford, University Hospitals Coventry and Warwickshire NHS Trust, King’s College London NHS Trust, Guy’s and St Thomas’ NHS Trust

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