EnComPaSS: An innovative approach to community-based palliative care delivery

Describe an evaluation of the first European e-shift project in a UK hospice – the St Luke’s e-shift model (EnComPaSS).

Professor Debbie Fitzsimmons
Palliative care need:

• Sheffield - “The Steel City”
  – High level of health inequality
  – Population of over 575,000
  – 1% die each year (5,750)

• Palliative care providers:
  – Macmillan Unit, Sheffield Teaching Hospital
    • 18 bed unit
  – St Luke’s Hospice
    • 20 bed unit
    • Therapies and Rehabilitation Centre
    • Small community team (band 7 nurses)
Challenges for palliative patients

- Limited supply of:
  - Palliative care in-patient care
  - Community-based palliative care

- Symptom escalation:
  - Patient, family and carers unable to cope
  - 999 call leading to hospital admission
  - Lack of support for discharge back home
  - Extended stays in hospital
  - Hospital becomes default place of death
Traditional Community Care Model

- 1:1 experienced Band 7 RN to Patient
- Costly
- Can’t be scaled
- Limited number of experienced specialist RNs
- Palliative RN training - accompanying experienced RN
EnComPaSS Approach

• Expand capacity of existing specialist (palliative) nurses

• Technology-enabled care provision
  ▪ Embedded iPOS

• Specialist nurse works remotely
  ▪ Monitors, mentors, and supports junior nurses

• Safely and cost-effectively supports patients in home

• ‘Grow your own’ training programme for palliative nurses
# Implementation and initial data collection

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital admissions data T1</th>
<th>Hospital admissions data T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>Implementation and preparation</td>
</tr>
<tr>
<td>2016</td>
<td>Funding awarded February 2015</td>
<td>March 2016: fully ‘live’ system</td>
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</tbody>
</table>

- **New MDT meeting structure**
- **Systematic Recording of IPOS**

T1 = 1st October 2014– 30th September 2015
T2 = 1st October 2015– 30th September 2016
Findings:
Changes to visit types

- Band 5 nurses able to provide community services
- Reduced need for joint visits and consultant visits

<table>
<thead>
<tr>
<th></th>
<th>Mar-Sep 2015</th>
<th>Mar-Sep 2016</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Band 5 Nurse - Visit</td>
<td>0</td>
<td>286</td>
<td>286</td>
</tr>
<tr>
<td>Consultant - Joint visit</td>
<td>65</td>
<td>28</td>
<td>-37</td>
</tr>
<tr>
<td>Consultant - Visit</td>
<td>40</td>
<td>20</td>
<td>-20</td>
</tr>
<tr>
<td>Nurse - Joint visit</td>
<td>170</td>
<td>51</td>
<td>-119</td>
</tr>
<tr>
<td>Nurse - Visit</td>
<td>3361</td>
<td>2730</td>
<td>-631</td>
</tr>
<tr>
<td>Specialist Palliative Registrar - Joint visit</td>
<td>84</td>
<td>45</td>
<td>-39</td>
</tr>
<tr>
<td>Specialist Palliative Registrar</td>
<td>5</td>
<td>125</td>
<td>120</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3725</td>
<td>3285</td>
<td>-440</td>
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Changes to visit times:

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>11-12</td>
<td>700</td>
<td>600</td>
</tr>
<tr>
<td>13-14</td>
<td>800</td>
<td>700</td>
</tr>
<tr>
<td>15-16</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>17-18</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>19-20</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>21-22</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>23-24</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Staff experience and perspectives:

**Data entry:**

- “I use the laptop, I started with the phone and it was awful…I had patients commenting that I looked like I was texting”
- “I do find the… phone is quite difficult… you look more professional I think if you have got a laptop in front of you”
- “When the NHS systems were affected by the Malware… I had a couple of visits and actually recording… those visits was more laborious… because I had to use free text, whereas…if we’d… had e-shift running, it would have been a case of use of the drop down menus and that sort of thing…certainly for medications”
Interdisciplinary working:

• “I can, as a delegator, divert anybody in the team that’s got their phone or their laptop, back to that patient that I saw the day before because they can access what I’ve done and the history [is] there in their hand, so that’s a really useful thing”

Quality of assessments:

• “I think IPOS and e-shift have married together really well, to make everybody have like a structured assessment which has only enabled better communication between ourselves… about actually what’s going on with that patient, to make ultimately decisions, more clear because before you … went with the flow of what the patient was needing to talk about, but that meant that you probably missed other things”
Changes to hospital admissions/LOS:

Improved care results in reduced/more appropriate admissions:

<table>
<thead>
<tr>
<th>Admissions</th>
<th>2014-15</th>
<th>2015-16</th>
<th>Change%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>NGH</td>
<td>4609</td>
<td>79.9</td>
<td>3441</td>
</tr>
<tr>
<td>WPH</td>
<td>720</td>
<td>12.5</td>
<td>738</td>
</tr>
<tr>
<td>RHH</td>
<td>442</td>
<td>7.7</td>
<td>369</td>
</tr>
<tr>
<td>Total</td>
<td>5771</td>
<td>100.0</td>
<td>4548</td>
</tr>
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</table>

General Hospital with Emergency Department

Cancer Specialist Hospital
Improved care results in reduced LOS:

<table>
<thead>
<tr>
<th></th>
<th>Hospital admissions data T1</th>
<th>Hospital admissions data T2</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice Patients</td>
<td>1521</td>
<td>1501</td>
<td>20</td>
</tr>
<tr>
<td>Patients admitted to Hospital</td>
<td>1238</td>
<td>1156</td>
<td>82</td>
</tr>
<tr>
<td>Total admissions</td>
<td>5771</td>
<td>4548</td>
<td>1223</td>
</tr>
<tr>
<td>Admissions per patient</td>
<td>4.66</td>
<td>3.93</td>
<td>0.73</td>
</tr>
<tr>
<td>Length of Stay per admission</td>
<td>6.23 days</td>
<td>5.99 days</td>
<td>0.23 days</td>
</tr>
<tr>
<td>Total hospital time</td>
<td>35902.46 days</td>
<td>27008.60 days</td>
<td>8,893.86 days</td>
</tr>
<tr>
<td>Total time per acute patient</td>
<td>29.00 days</td>
<td>23.36 days</td>
<td>5.64 days</td>
</tr>
</tbody>
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Health system savings:

Assumptions:

a) Admissions accepted by the hospice community service remain static

b) All acute admissions are to bed-based services, at a cost of specialist palliative care of £371/bed day (PSSRU, Unit Costs of Health and Social Care 2015).

1,156 patients save 5.64 acute care bed days per patient

1,156 pts x 5.64 days = 6,519.84 days saved

6,519.84 days x £371 = £2,418,861 per year
Benefits of approach:

• Synchronous online patient information available
  - Improves communication / coordination

• Supports interdisciplinary working
  - By different providers (acute/community/third sector)
  - By different professionals (nurses/OT/PT/SLP)

• Supports delegated care delivery
  - By more junior nurses
  - By assistant practitioners
  - By unregistered care providers (care aides)

• Facilitates timely, seamless care delivery
Future UK implementation projects:

• Potential solution for acute sector bed blocking issue:
  - Early discharge programs:
    ▪ COPD
    ▪ CHF
    ▪ Stroke

• New community care provision:
  - Post-surgery wound care
Thank you!

Project Team:

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EnComPaSS Project: http://clahrc-yh.nihr.ac.uk/industry/case-studies/sensory-technologies
NIHR CLAHRC Yorkshire and Humber website: www.clahrc-yh.nihr.ac.uk

https://www.eshiftcare.com/land

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