Health Failure Telehealth Final Report

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Heart Failure Specialist Nurse
Heart Failure

- Heart failure is a life limiting condition with outcomes worse than most cancers

- Heart failure is manifested by severe symptoms and the disease trajectory is unpredictable and punctuated by episodes of decompensation which often results in emergency hospital admission

- Heart failure accounts for 5% of all emergency hospital admissions
Heart Failure

- Identifying early signs and symptoms of heart failure decompensation, reduces hospitalisation, and improves symptoms and quality of life

*Cowie et al 2014 Improving care for patients with acute heart failure*  
*ESC*
Demographics

• Population of Rotherham – 258,400
• Population of diagnosed Heart failure – 2,061 = 0.8% of the population
• Population of Coronary Artery Disease -11,121
• 75% of heart failure is secondary to coronary artery disease, therefore the incidence of heart failure is projected to increase and could increase by 11,121 in the future
• The average age of patients with heart failure is 75 years. The rising numbers of older people, particularly in this age group, will result in rising demand for health services
• The public and patient awareness of heart failure is extremely poor, often attributing symptoms of breathlessness and/or oedema to old age and so often do not seek advice for symptoms.

• Hospital admissions could be avoided if patients identified early signs and symptoms of decompensation.

• The Telehealth project aims to educate and support patients in developing self monitoring behaviour and to enhance confidence and promote patient expertise in the mechanisms associated with acute decompensating heart failure.
Telehealth Project

• 12 week remote monitoring of weight, BP, HR and responses of questionnaires related to heart failure symptoms

• E-programme – 12 week educational programme, weekly topics to increase patient knowledge and expertise – methods include films, quizzes, written material
Project Aims

1. To enable increase in Heart Failure Specialist Nurse Caseloads, specifically most unstable (red) patients.
2. To reduce admissions across Caseloads (additional patients and patients completing programme).
3. To improve outcomes of patients that complete programme, including quality of life.
4. To improve patient confidence in the use of IT (specifically as a means of managing health and wellbeing inc social aspects).
5. To monitor learnings for wider exploitation of digital / remote technologies.
Telehealth Project

- 99 patients were registered
- 80 patients received telehealth

- Average age was 67 years old
- 20 of the telehealth patients were in their 80s and 90s

- Important to have strong links with the CCC and SPS

- Support of Consultants and colleagues was vital in service development

- The service has now stopped and this evaluation is aimed at supporting decision making going forward
RAG Caseload

- **RED** – Actively/acutely preventing hospital admission - Acutely unstable and complex patient.
  - Up to twice daily visits

- **AMBER** – Recently unstable, complex needs, at risk of decompensation and hospitalisation.
  - Visiting as required, usually 1-2 weekly

- **GREEN** – Stable heart failure. Uptitration of medications, and education phase.
  - Visiting 2-4 weekly or attending community HFSN clinic
## Rotherham Deployment Tracker

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<th>Date</th>
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<th>Devices Delivered</th>
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</table>
Patients by gender

- Female: 1
- Male: 49
1. Impact on Referrals

![Graph showing total referrals from 2012/13 to 2014/15]
2. Impact on Hospitalisation

Patients are 3 times more likely to be admitted without Telehealth

50.9% reduction in length of hospital stay
<table>
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<tr>
<th>Heart failure admissions</th>
<th>Number of admissions</th>
<th>Length of stay</th>
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<tr>
<td>Telehealth cohort =81</td>
<td>5</td>
<td>5.6 days</td>
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<tr>
<td>Rotherham HF population</td>
<td>292 (2013) 298 (2014)</td>
<td>10 days 11 days</td>
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3. Impact on Quality of Life

- 93% of patients following the Telehealth programme now feel confident in their knowledge of heart failure

- 20% improvement in knowledge of the main symptoms of heart failure
3. Impact on Quality of Life

- Patients were less frightened to be more active, they more likely to push themselves.
- 36% of patients said that their heart condition stopped them from doing things what they wanted to do, compared with 61% pre Telehealth.

- The Telehealth cohort slept better and felt less frustrated and irritable
  - Energy levels were increased by 11%
  - 5% increase in confidence levels
- 27% of patients felt less dependent on others
4. Impact on Confidence in IT

- Average age of the Telehealth cohort = 67
- Number of patients in 80s and 90s = 20
- 14% increase in confidence in using IT equipment and decisions to purchase IT equipment following project
- 91% of patients now describe themselves as very confident
5. Monitor Wider Learnings

- Technology is only one part of service model. Need to consider service staffing / pathways /
- Managing equipment and installs requires dedicated focus
- Patient Drop Outs (prior to experiencing equipment)
- Telehealth planning needs to be strategic with engagement across organisations.
Conclusions

• Education and supportive monitoring is the cornerstone for patients to achieve expertise and confidence, which results in improved patient experience and quality of life, reducing hospital admissions and reducing cost burden of Heart failure on the NHS.
Where do we go from here?
Any questions or feedback?