Innovative Telehealth Programme Across NHS Northern England Strategic Clinical Networks

In Conjunction with Projects ID37 (MECS) and ID51 (T1KDZ)

Mr Paul Marriot TECS Consultant and Clinical Advocate NHS England

Liz Allan TECS Consultant Engagement and Pathway Development NHS England

Jackie Smart TECS Consultant Florence Application NHS England

Rachael Forbister TECS Pathway Development Sunderland CCG
The Origins of Telehealth In Tyne & Wear

The South of Tyne & Wear PCT Telehealth Project ran from May 2011 to March 2013

Population of around 644,000

3 - Foundation Trusts

3 - PCT’s / CCG

3 - Metropolitan Councils
Sunderland, Gateshead and South Tyneside

3 – Telecare/Telehealth Control Rooms
Project background:

The challenges facing our NHS are well known. By 2018 it is estimated that nearly three million people will be living with three or more long-term conditions. While the demand for services rises, we know that the resources at our disposal cannot keep pace. We therefore have to do more with what we have. The question, then, is how can we ensure people continue to get high quality care for the future? One opportunity lies in the fact that people increasingly want to own and control their own healthcare. By harnessing the power of digital technology we can help by empowering people to manage their care in a way that is right for them.

*Professor Sir Bruce Keogh National Medical Director NHS England*
*Recent Letter to TECS Implementation Group (Sep 2014)*
Digital Technology in Maternity Healthcare

Messaging Enabled Care Services (MECS)

The “Florence” SMS Texting System
- a Collaborative Maternity Innovation Project
Multi Partner Teams

PIH Hospital Team

GDM Hospital Team

NHS England & Sunderland CCG Telehealth Team
Innovative Type 1 Kids Diabetes Pathway
The Multi Matrix Telehealth Model Seeks to Cross the Whole Life Perspective by Proportionally Matching Telehealth Systems with the Patients Needs, Lifestyles and the Clinicians Medicine.
Schematic Depiction of Comprehensive Heart Failure Care

1. Patient Offered Inclusion on Simple Self Care (TH) as soon as First Symptoms of LTC Appear
2. Long/Short or Intermittent Duration Application of Simple Self Care Telehealth (TH) Florence System
3. Rapid Deployable Short Duration 3/4G Telehealth with Primary or Secondary Care Support
4. Palliative or Long Term Telehealth Home Install with Community Support / Palliative Also Care & Nursing Home Application
5. Sudden Death Event

Time

Goodlin, S. J. J Am Coll Cardiol 2009;54:386-396
NHS Florence SMS Simple Telehealth System

Specialist Clinicians
GP Practices
Community and Specialist Nursing
Public Health

Prompts and advice
SMS

ACADEMIC HEALTH SCIENCE NETWORK
NORTH EAST AND NORTH CUMBRIA
For Patients Who Can Not Use SMS There is a WHZAN Solution
The Project Progress So Far
Messaging Enabled Care Services
Washington D.C. Conference June 2014
Sandwell Diabetes Clinicians Provided with GDM Pathway

... and an orderly queue is developing Regionally and Nationally for PIH and GDM MECS
Project Progress Up to 31st October 2014
New Clinical Pathways Created

- New Pathways 1st Quarter: 25
- New Pathways 2nd Quarter: 27
- Running Total Pathways Created: 52
Numbers & Types of Clinical Teams Involved up to 31st October 2014

- CCG: 20
- FT: 22
- Public Health: 2
- Primary Care Centre: 3
- National Sharing: 3
- 3rd Sector: 2
- Clinical Teams: 52
### Some of the Current Pathways within the Northern Senate (there are now around 100)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Clinical Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Failure, Angina etc.</td>
<td>FT, GP</td>
</tr>
<tr>
<td>COPD and Respiratory etc.</td>
<td>FT, GP</td>
</tr>
<tr>
<td>Hypertension</td>
<td>GP</td>
</tr>
<tr>
<td>Diabetes</td>
<td>FT, GP</td>
</tr>
<tr>
<td>Gestational Diabetes</td>
<td>FT</td>
</tr>
<tr>
<td>Pre Pregnancy HbA1c Family Planning</td>
<td>FT</td>
</tr>
<tr>
<td>Parkinson’s</td>
<td>FT</td>
</tr>
<tr>
<td>Rapid Discharge</td>
<td>FT</td>
</tr>
<tr>
<td>Deprivation Medicine and Social Prescribing</td>
<td>GP and 3rd Sector</td>
</tr>
<tr>
<td>Acquired Head Injury and Stroke</td>
<td>FT, GP</td>
</tr>
<tr>
<td>Primary Care Step Up Step Down</td>
<td>GP</td>
</tr>
<tr>
<td>Care and Nursing Home</td>
<td>GP</td>
</tr>
<tr>
<td>Weight Management</td>
<td>FT, GP, LA &amp; PH</td>
</tr>
<tr>
<td>Smoking Cessation</td>
<td>LA &amp; PH</td>
</tr>
<tr>
<td>Remote Wound Dressing Monitoring</td>
<td>FT</td>
</tr>
<tr>
<td>Community Matron Case Load</td>
<td>FT</td>
</tr>
<tr>
<td>Alcohol Induced Morbidity</td>
<td>FT</td>
</tr>
</tbody>
</table>

*FT = Foundation Trust  GP = General Practitioner  LA & PH = Local Authority & Public Health*
A Snapshot of Some of the Early Economic Indicators

- Pregnancy Services: Early calculations show conservatively a cost saving of between £300 to £400 per patient in both PIH and GDM Pathways. (A Full Health Economy Impact is to be professionally and independently produced by March 2014)

- All 1st Generation Telehealth Equipment: Has been replaced in Community Nursing within Sunderland by use of a combination of Florence and WHZAN Telehealth Systems. Cost comparison per patient:
  1st Generation Equipment £1,000 to £1,500 pa
  Florence £52 to £80 pa
  WHZAN £365 pa
  (Patient Feedback has been excellent to date)

- Telehealth monitoring of sitting and standing blood pressure in patients with Parkinsons Disease.

“'A larger on-going study would no doubt incur costs re the supply of blood pressure monitors and staffing. However in terms of reducing hospitalisation this may be a small consideration by comparison.’” Gina Robinson PDNS 2014
Local Industry:

Working with NHS Innovations North East: Inventors and Small Manufacturers have benefitted from the input and expertise of the NHS England Telehealth Team as they bring products to the marketplace.

Where appropriate introductions to clinicians and potential users of the Apps and Devices have been facilitated. These briefly but not exhaustively have included:

- Wound Imaging
- Physiotherapy Apps
- Health Visitor & Personal Security
- Parkinsons Diagnostics

We hope by the end of the project to be able to report that at least one of our Local Industry producers have provided equipment or Apps to one of our programmes in the:

Innovative Telehealth Programme Across NHS Northern England Strategic Clinical Networks
Contact Details

**Paul Marriott** Lead Telehealth Consultant
NHS England Northern England Strategic Clinical Networks’.
Clinical TECS Advocate NHS England
paul.marriott@nhs.net
marriott.p1@sky.com
07779816519