Sheffield: using co-design & technology to deliver person-centred care

Learning from the NHS England Test Bed Programme

www.ppptestbed.nhs.uk

@Perfect_Pathway
#PerfectPathway

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Sheffield City Region Test Bed Programme

One of seven national NHS England Test Beds
www.england.nhs.uk/ourwork/innovation/test-beds/
www.ppptestbed.nhs.uk/projects

• “Combinatorial innovation”
• Robust evaluation
• Shared learning

Aims “to benefit patients with **multiple long term conditions** by combining and integrating innovative technologies and pioneering service designs, to keep patients well and independent and **avoiding unnecessary hospital attendances**.”
Health, Social Care & Academic Engagement

Sheffield Teaching Hospitals NHS Foundation Trust

The University Of Sheffield

Sheffield Health and Social Care NHS Foundation Trust

NIHR CLAHRC Yorkshire and Humber

Yorkshire & Humber Academic Health Science Network

Sheffield

Sheffield City Council

Working Together

Primary Care Sheffield

Voluntary Action Sheffield

Sheffield Hallam University

Sheffield City Region Local Enterprise Partnership

Sheffield Children's NHS Foundation Trust
Our Test Bed Objectives

1. Develop a **sustainable method** of testing, developing and spreading innovation with health and social care partners in the Sheffield region.

2. Re-design care pathways **bringing together technologies and people** working together in different ways to support integrated and personalised care.

3. Support a **culture of transformation** and improvement in the NHS and other health and care organisations.

4. Support **co-ordinated decision-making** across health and care organisations informed by real-time data and information.

5. Evaluate the combination of new technologies and service re-designs to produce robust and objective results that can be **shared nationally**.
In conversation….identifying our healthcare challenges
Why..Care Home Population?

- Consultation with city region stakeholders – health & social care; patients; industry; care homes; local authority; innovation agencies.

- Champions – clinical; Test Bed Advisory Group (TAG); CCG, LA

- Around 2,900 people reside in approx. 120 care homes in Sheffield

- 3,000 attendances to A&E in 2016/17 of which 40% were subsequently admitted to the Frailty Unit.

- Commissioning & operational relationships – coordination to respond to complex needs & relationships

- Population health knowledge limited

- Evidence that care homes may help to reduce hospital utilisation in the last few months of life
  (Source: Qualitywatch)
Breakdown of elective and emergency hospital admissions for patients 75 and over in 2011/2012 (Source: Qualitywatch, 2015)
What is Digital Care Home?

“An “early warning system” to highlight changes in health as early as possible - sharing information digitally so that it is accessible to local health care professionals and integrated teams can work in partnership to respond to resident’s health needs”.

- Care home teams record vital signs observations for consenting residents as part of a morning routine on a regular basis using standard monitoring equipment (e.g. blood pressure monitor, thermometer, pulse rate monitor)

- Enter information via the Digital Care Home Inhealthcare Professional app (desktop / tablet / smartphone)

- Information made available to the Single Point of Access (SPA) team (secondary / community) to coordinate a response should this information indicate any potential health needs.

- Care home staff, GPs and community nursing teams mobilised to work together to determine the best course of action for a resident based on their results if a change in health has been identified.
Care Home Partners:

- Balmoral
- Moorend Place
- Chapel Lodge
- Haythorne Place
- Chatsworth Grange
- Alexander Court
- Loxley Court

Innovator:

Community & Secondary Care:

Evaluation:

Public Engagement:

9 GP Practices
What are we testing & evaluating?

1. Does the model serve as an ‘early warning system’ to identify deterioration in residents health and enable an effective response?

2. The impact on:
   - Quality of residents lives
   - Reduction of A&E attendances &/ or admissions to hospital (re-admissions?)
   - Workforce
   - Costs to emergency care system

3. Could this be standardised for monitoring of residents health and wellbeing across many care homes and other regions?

Plus

4. Does this service provide ‘benefits’ to all stakeholders?
Link to film clip
The care home receives a summary email with the monitoring tasks that need to be completed that day for each resident who has consented to participate.

Single Point of Access check for any alerts from readings at a specific agreed time / day.

Care home enter the observations directly into the app on their tablet or on the care home manager’s computer as they complete their rounds.
Digital Health Platform

Single Point of Access (SPA) at Northern General Hospital

Observations from Care Home Monitoring

Patient’s GP Record

Hospital Systems
What have we learnt?

• Significant potential across the health & care system to use technology to **enable** & **enhance** relationships & processes

• Value in the shared decision making support of SPA for resident care

• Importance of GP engagement – triage for ward rounds

• Opportunity to use information within care plan – ‘**person-centred care**’

• Purpose of technology is key

• **Usability**

• Implementation – investment upfront in training; engagement (workforce, residents, family & friends); resources, more technical support

• Let’s make using technology addictive!

• Don’t bombard the care home sector with multiple projects – knit them together
What is the Strength & Balance (Falls Prevention) project?

- **Kinesis QTUG™** (Quantitative Timed Up and Go) is a **medical device** for assessment of falls risk and frailty.

- Introduced as part of **change to assessment processes**. Opportunity for clinicians to re-think their model of care and assess people at an earlier stage for their risk of falls.

- QTUG gives practitioners the ability to assess gait **without requiring an expert** to then make appropriate clinical decisions and referrals based on the information obtained.
PATIENT'S MOBILITY ASSESSMENT

PATIENT

CLINICIAN

BODY WORN INERTIAL SENSORS
CLINICAL INDICTION OF FALLS RISK
DATA OVER TIME
AND FRANITY QUESTIONNAIRE

COMPREHENSIVE MOBILITY ASSESSMENT
The Patient Perspective…

https://www.youtube.com/watch?v=cUTDxLqVIWA&t=1s
What have we learnt?

- Starts the conversation about falls

- Early identification of falls risk & earlier referral onto the falls pathway for treatment to improve people’s ability to self-manage (independence & well-being benefits) and reduced unplanned hospital admissions.

- Become the expert!

- Opportunities in multiple settings

- Opportunities in multiple applications
What next – for Test Beds?

• Shared learning from NHS England Test Beds (evaluation dissemination & implementation ‘toolkits’) from June 2018

• Test Bed Partnership Event – 22nd May 2018

• Digital Care Home - opportunity for Sheffield care homes to join the project in summer 2018

• Do you want to be a partner in a Wave 2 Test Bed?

https://www.england.nhs.uk/ourwork/innovation/test-beds/

Deadline for Expression Of Interest (online) – 27th March 2018

Launch – Autumn 2018
What next – for Sheffield?

Bring Test Bed learning into collaborations with CCG, local authority and care home community e.g. ‘The framework for enhanced health in care homes’ (NHS England Vanguards)

- Enhanced primary care support
  - MDT support including coordinated health & social care
  - Reablement & rehabilitation
  - High quality of end of life & dementia care
  - Joined up commissioning between health & social care
  - Workforce development

Better use of data, IT & technology

- Care Home Outcomes Platform (Sheffield CCG) - introducing use of health outcome measurement for individuals in Care Homes
  - used by care providers;
  - anonymised to provide a population health perspective for commissioning;
  - co-design a digital method that enables easy collection and use of data for health impact.
<table>
<thead>
<tr>
<th>Outcome Metric required</th>
<th>The problem that the metric will address</th>
<th>Existing metric identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nutritional Status</td>
<td>Hunger, malnutrition, comfort associated with eating and swallowing food</td>
<td>Malnutrition Universal Screening Tool - MUST</td>
</tr>
<tr>
<td>2. Hydration</td>
<td>Thirsty, absence of dehydration</td>
<td></td>
</tr>
<tr>
<td>3. Mobility</td>
<td>Ability to stand, turn, walk short distance and sit</td>
<td></td>
</tr>
<tr>
<td>4. Activity and participation</td>
<td>Lonely, bored, isolated due to mental status or limits to community engagement</td>
<td>Therapy Outcome measure (TOMs)</td>
</tr>
<tr>
<td>5. Mental Health</td>
<td>Acuity of cognitive impairment and its effect</td>
<td></td>
</tr>
</tbody>
</table>

* further involvement of residents and carers is being planned to validate these priorities
The Model

- ‘Platform' to provide a data set of health and wellbeing information for an individual resident
- Managers can see the individual's health outcomes and make decisions about care/service needs
- CCG can collate population data for all homes to assess commissioning needs
- Agreement about the most important outcomes that achieve wellbeing and limit acute illness
- There is no suggestion that this data replaces care planning or CQC data
SMART: Sheffield