Population health management
The journey to value-based care

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The Lancashire and Cumbria Innovation Alliance (LCIA) was formed in April 2015 out of members of Lancaster University’s Health Hub.

We shared a belief that the use of pioneering digital technology in care could bring important benefits to service users, staff, management and the public at large.

Simon Steven’s stated intention in the NHS Forward View to set up a new ‘test bed’ site for worldwide innovators.

So we got together and applied to NHS England to set up one of the Health and Care Test Beds - ably supported by our Academic Health Science Network (AHSN), the Innovation Agency.
Size, range and number of organisations collaborating

Lead Innovator:
- Philips **PHILIPS**
  *Helped identify other innovators to provide bespoke combinatorial solutions for the programme*

Test Bed Innovators:
- Speakset
- Cambridge Cognition
- uMotif
- Intelesant
- Simple Telehealth
- House of Memories
- Good Things Foundation

Clinical Delivery:
- Fylde Coast Vanguard
- Better Care Together Vanguard

Evaluation:
- Lancaster University’s Centre for Aging Research (C4AR)

Governance:
- Lancashire Care NHS Foundation Trust
- Lancaster Health Hub
- The Innovation Agency
# Target Cohorts

<table>
<thead>
<tr>
<th>Cohort 1</th>
<th>Age</th>
<th>&gt;25%</th>
<th>COPD, Heart Failure</th>
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<tr>
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<td>&gt;55</td>
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<thead>
<tr>
<th>Cohort 2</th>
<th>Age</th>
<th>&gt;10-25%</th>
<th>COPD, Heart Failure</th>
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<tr>
<th>Cohort 3</th>
<th>Age</th>
<th>&lt;10%</th>
<th>COPD, HF, Diabetes, CHD, Hypertension</th>
</tr>
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<tr>
<th>Cohort 4</th>
<th>Mild Dementia MMSE 20-26</th>
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Technology

Lancashire & Cumbria Innovation Alliance

PHILIPS
What have we achieved?

- 724 recruited across 4 cohorts
- 423 active using technology in their homes
- 120 have completed the programme (180 left the programme)
- Negotiation of 3 months extension to the recruitment period to support a robust evaluation report June 2018
- Phase 1 and 2 of evaluation underway
- Use of control data negotiated and first set sent to University
- Spread and Adoption group in place and work started
- Interim report produced by Lancaster University for NHSE Expo
- Test Bed Board reflects the uniqueness of the partners in the programme. It meets monthly via Skype and face to face quarterly
- Formal Clinical Operational Groups (COGs) are held fortnightly in each Vanguard area to track recruitment, problem solve and action plan
- Lessons learned report finalised by evaluation team
## Reasons for leaving?

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<tr>
<th>Reason</th>
<th>Fylde Coast</th>
<th>BCT</th>
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<tbody>
<tr>
<td><strong>Cohort</strong></td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td><strong>Not contactable/unreachable</strong></td>
<td>1 1 1 13</td>
<td></td>
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<tr>
<td><strong>Moved residence</strong></td>
<td>1</td>
<td></td>
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<tr>
<td><strong>Deceased</strong></td>
<td>8 3 1</td>
<td></td>
</tr>
<tr>
<td><strong>Did not get on with tech</strong></td>
<td>13 7 3 3 8 12</td>
<td></td>
</tr>
<tr>
<td><strong>Discharged from service</strong></td>
<td>21</td>
<td></td>
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<tr>
<td><strong>Decline in health</strong></td>
<td>14 6 5 (2 stepped up to C1) 1 1</td>
<td></td>
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<tr>
<td><strong>Consent/questionnaire too long/upsetting</strong></td>
<td>2 3</td>
<td></td>
</tr>
<tr>
<td><strong>Completed 6 months</strong></td>
<td>2 78 25 (1 stepped up to C1)</td>
<td></td>
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<tr>
<td><strong>Other/rather not say</strong></td>
<td>16 7 1 11 9</td>
<td></td>
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The challenges are:

- Size, range and number of organisations collaborating (Over 70 individuals)
- 2 vanguards with 2 different models of care
- Different care pathways
- Recruitment into 4 cohorts
- Varied interpretation of risk
- Recruitment of Clinical Staff
  - Availability / lack of
  - Time taken
- Provider/commissioner arrangements
- Communication pathways
The challenges are:

- Spread and adoption of Test Bed technology solutions
- Partners competing for the same contracts
- NHS procurement guidelines
- Operating systems e.g. IT
- Governance: including IG
- Competing for resources, patients and clients
- Finding and agreeing common goals with individual values and priorities
- Managing evaluation protocols
What have we done to resolve?

- Built a programme based on an ethos of mutual respect
- Find the right individuals to talk to – always listen & communicate
- Share evaluation protocols
- Thinking strategically across projects to find mutual benefit and build on it
- Create a spread and adoption task and finish group
- Use the membership of the Project Board as ambassadors
- SRO is member of the Healthy Lancashire and Cumbria Board
- Link with the Healthy Lancashire and South Cumbria Digital team
- Regular liaison with NHSE Account Manager
- Remember that there is usually a solution, we just need to find it
- Asking “What If?”
- Dog with a bone approach – never give up!
What have we done to resolve?

- Development of the Clinical Operational Groups (COGs)
- Close liaison with the Vanguard Project Office
- Project team members spend time in Vanguards trouble shooting and consenting patients
- Become proficient with the technology to be able to support clinicians, install and problem solve
- Produced simple information and trouble shooting leaflets regarding the technology
- Visited a variety of teams to discuss the Test Bed
- Liaised with the innovators on behalf of the Clinical Teams
- Procured simple mobile phones to enable patients without access to a phone opportunity to be recruited to C2 and FLO
Impact of Test Bed: Organisational development

- Deep experience of collaborating across sectors
- Systems and practices for planning, monitoring and delivering complex project
- Novel methodology for robust evaluation with flexibility to accommodate “real world” practice, enable “real time” learning of lessons, and support action learning approach with practitioners and tech providers
- Evidence to inform commissioning decisions
- Successful engagement of staff and local population
- New knowledge and skills
- Confidence
- “Proud to Innovate”
- “Hungry for more”
Forward View

- Retention, Retention, Retention to March 2018 to ensure robustness of evaluation.
- Finalise demobilisation plan
- Create a spread and adoption toolkit to aid commissioners
- Fully utilise our knowledge and “know how” – a major asset
- Optimise adoption and spread of Test Bed results
- Develop further collaborative, cross-sectoral funded programmes – “self-fertilisation”
- Build on momentum generated by linked initiatives
- Continue to work in partnership with NHSE on the Test Bed programme
- Publish evaluation reports
  - Interim October 2017
  - Final June 2018
Extension/ Expansion
Simon Stevens Plan

Scenario 1:
Test Beds who need more time to increase trajectories with their current models of care may be given additional time to boost recruitment onto their programme.

Scenario 2:
If a Test Bed has demonstrated a strong and successful methodology and delivery model, they may be given an extension to test new and additional elements to their current programme with the support of NHSE.

Scenario 3:
If a Test Bed has put in place strong links, and has a good spread and adoption plan and network in place, NHSE may assist Test Beds to work with commissioners to begin the spread and adoption of current models and technologies in the current commissioning cycle.
Bringing the evidence together

• The LCIA testbed has learned a huge amount about the practical challenges in implementing a risk stratified supported self-care programme across distinctly targeted cohorts.

• These lessons learned show that although tricky it is possible to match a risk stratified approach with local case finding and knowledge to assemble credible cohorts and deliver a step up step down supported self-care service to multi morbid citizens living in the community.

• Early evidence shows a reduction in hospital admissions and healthcare usage and better patient reported outcomes in terms of greater confidence, activation and empowerment in line with the findings delivered by the larger but less stratified approach delivered through the MI Dallas programme in Liverpool a few years back.

• It is hoped that the LCIA testbed will similarly benefit from mainstream CCG funding to scale up and become an integral part of the new models of care delivery for the emergent ACS’s in the area.
Our evaluation partners at Centre for Ageing Research (C4AR), Lancaster University have produced a poster based on some interim findings.

You can download the poster at: www.lciatestbed.org.uk/resources
What do our patients and clinicians think?

Philip Edwards – Cohort 1 patient

“I have been using the Motiva tablet to monitor my health conditions, I think it is fantastic and has meant that I can continue with full time employment on the oilrig as I can submit my readings whilst offshore and know that my doctor is checking and would be in touch if there were any problems. If I didn’t have the technology I probably would have had to quit my job to allow time to visit my doctors to provide regular readings. I would promote the Test Bed programme to anybody who wants to carry on living their normal life whilst managing a long term condition.”
What do our patients and clinicians think?

Fylde Coast Vanguard – Cohort 3 patient

“Did not know what to expect when I first got it, after a couple of days I got used to filling out the app. I am now doing the diary twice a day morning and night. I am going on holiday on Tuesday to Tenerife and I will be taking my iPad with me so I can carry on with the diary. I have found doing this daily, it keeps my mind alert and helps me to note when I am in pain, if I am doing too much and what I need to do less.”

Susan Johnston – Cohort 4 patient

“I like the fact that I can contact my clinician at any time I am concerned or have any questions about my condition. The fact that this can be done through my TV screen where I can have a face to face discussion will make me feel that I have support and reassurance at any point.”
What do our patients and clinicians think?

Dr Mark Denver – Clinical Lead: Better Care Together

“The programme empowers patients to understand their own health and actively manage it to prevent clinical input where possible whether through me as a GP or a hospital admission. Patients can remain at home with the assurance that they are being monitored by a clinician who will be in contact if there are any issues.”
I like the sense of reassurance it gives me.
Thank You

For more information about the LCIA Test Bed Programme, please contact us on:

@LCIATestBed
www.lciatestbed.org.uk

07908 714053
testbed@lancashirecare.nhs.uk
Flexible service design to meet local needs

**Activate patients**
Activation and engagement services
- Risk & performance management
- Regulatory report submission
- Transformation Services & Consulting

**Navigate care for patients**
Care navigation services and capabilities
- Outreach campaign management

**Understand your population**
Value-based care platform
- Chronic condition management
- Support and social care
- Prevention of chronic conditions
Core competencies for delivering population health

**Understand your population**
- Aggregation
  - Compilation of disparate clinical/administrative data sources to support population health
- Analysis
  - Segmentation of aggregated data to communicate meaningful innovation
- Administrative/Financial
  - Internal and external strategic program analysis

**Navigate care for patients**
- Care Coordination/Health Improvement
  - Scalable care management support for standardized interventions
- Patient Engagement
  - Patient-centric communication and alignment with health goals and improvement

**Activate patients**
- Patient Engagement
  - Actionable workflow integration for clinicians
- Clinician Engagement
  - Actionable workflow integration for clinicians
- Patient centric, goal driven coaching
- Engagement programs to connect and motivate patients
- Connecting and supporting clinicians
- Actionable workflows

- Aggregation from disparate sources
- Normalization of data
- Connecting to many data sources across settings
- Risk scoring
- Patient stratification
- Quality program optimization
- Program recommendations
- Clinical quality reporting
- Financial outcomes reporting
- Care planning
- Coordination of care
- Providing evidence-based interventions.
THANK YOU