Agenda Item: 6.4
Evidencing Value of the West of England Academic Health Science Network – Year 1 Report

1. Summary

The purpose of this project is to evidence the value of the West of England Academic Health Science Network, addressing the Academic Health Science Network licence objectives and the West of England Academic Health Science Network workstreams.

The project engages academics from the Universities of Bath, Bristol, West of England and Cardiff and NHS evaluation expertise. It integrates the theoretical and practice based themes of healthcare supply networks, innovation networks, evidence-based management, patient/public involvement and patient safety. It is an applied, empirically driven, research project designed to deliver measurable, evidenced impact on healthcare practice and regional economy and society in addition to academic publications.

2. Research Aim

This research aims to design and implement a framework and methodology to evidence the value of the West of England Academic Health Science Network. Academic Health Science Networks are inter-organisation networks engaging in systems of healthcare supply and research and innovation. In addition, they are governed by their NHS England licences, members and stakeholders. There are broader policy frames that they must operate within, such as equality and diversity, sustainability, ethics, PPI and patient safety, so their evaluations should also incorporate evidence relating to these broader policies. Academic Health Science Network licence objectives are to evidence impact on:

- Needs of patients and local populations
- Speed of adoption, spread of pace and scale of innovation
- Culture of partnership and collaboration
- Wealth creation (in particular SMEs in the region)

The West of England Academic Health Science Network’s workstreams are:

- Enterprise and Translation
- Patient Safety
- Quality Improvement
- Connecting Data for Patient Benefit
Patient and public involvement is an enabling programme supporting each of the other programmes

The framework and methodology to evidence the value of the West of England Academic Health Science Network will address both the Academic Health Science Network licence objectives and the West of England Academic Health Science Network workstreams.

3. **Evidence of established research team and contract with the West of England Academic Health Science Network**

Appendix 1 describes the research team from the Universities of Bath, Bristol, West of England and Cardiff who are working on this evaluation.

4. **Stated research questions, themes, theme leaders and initial work package structure**

The research questions and sub-questions are still being developed, informed by the literature reviews, exploratory interviews and initial case studies. Overarching research questions for the project are:

a. What evidence is there of value added by the West of England Academic Science Network to address:
   - Needs of patients and local populations
   - Speed of adoption, spread of pace and scale of innovation
   - Culture of partnership and collaboration

b. Wealth creation (in particular SMEs in the region)
   What evidence is there of value added by the West of England Academic Health Science Network through the workstreams of:
   - Enterprise and Translation
   - Patient and Public Involvement
   - Patient Safety
   - Quality Improvement
   - Connecting Data for Patient Benefit

Further discussions are required to decide if all workstreams will be addressed and relative weight given to each workstream.

<table>
<thead>
<tr>
<th>Academic Themes</th>
<th>Academic leads/ interest</th>
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<tbody>
<tr>
<td>Evidence based management</td>
<td>Rachel Churchill, Christine Harland</td>
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<tr>
<td>Inter-organisation networks</td>
<td>Jens Roehrich, Christine Harland</td>
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<tr>
<td>Innovation networks</td>
<td>Steve Conway, Wendy Phillips, Jens Roehrich, Udonna Okeke</td>
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<tr>
<td>Patient/ public involvement</td>
<td>Pam Moule, Jackie Barker</td>
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The study will be a longitudinal 5 years ‘whole network’ study based on evidencing outcomes and impact. It will involve a multi-method approach and triangulation of primary and secondary qualitative and quantitative data.
5. **Phd recruitment process in progress or completed for those HEIs choosing to use a PhD as research resource**

Due to delays in contracting for the project, the Universities of Cardiff and Bristol have not yet recruited their PhD students.

6. **Documented and available literature reviews on healthcare supply networks, innovation networks and evidence based management**

Initial scoping literature reviews have been performed in the areas of inter-organisation networks, innovation networks, evidence-based management and patient/public involvement. The purpose of initial scoping reviews is to provide guidance to inform the development of research questions and methodology, and the design of full systematic literature reviews.

Key findings from these scoping reviews cluster around:
1. Benefits of networks over other organisational forms
2. Pre-conditions for assuring network effectiveness
3. Importance of focus of network strategy
4. Effective network processes
5. Critical role of smaller, sub-networks
6. Critical role of network leaders as people rather than task leaders – more ‘host’ than ‘hero’
7. Critical role of social networks in innovation adoption and diffusion
8. Difficulties of representation of population diversity in PPI
9. Policy drivers for networks engaging public, as opposed to expectation of impact

7. **Agreement with the West of England Academic Health Science Network on selected case studies**

Case studies of product/service innovation networks at various stages of the innovation life cycle are proposed as the main vehicles for examining the research questions.

<table>
<thead>
<tr>
<th>Case study</th>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 PreCept – magnesium sulphate use in pre-term labour</td>
<td>Rachel Churchill, Emma Gibbard, Steve Conway, Udonna Okeke, Jens Roehrich</td>
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<tr>
<td>2 Anti-coagulants</td>
<td>Rachel Churchill, Emma Gibbard, Steve Conway, Udonna Okeke, Jens Roehrich</td>
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<tr>
<td>3 Cemented hips</td>
<td>Rachel, Louise, Steve, Udonna</td>
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<tr>
<td>4 Evidence-based commissioning</td>
<td>Emma Gibbard, Rachel Churchill</td>
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<tr>
<td>5 Patient public involvement (PPI)</td>
<td>Pam Moule, Jackie Barker, Hildegard Dumper</td>
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<tr>
<td>6 Challenges to industry e.g. type 2 diabetes challenge</td>
<td>Liz Dymond, Lars Sundstrom, Christine Harland, Duncan Eaton</td>
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</table>
Case studies 1 – 3 are existing ‘Evidence into Practice’ projects within the West of England Academic Health Science Network portfolio. These projects are being evaluated by the West of England Academic Health Science Network evaluation team – this evaluation will provide evidence of uptake. Our role is to examine the networks, their processes and their performance relative to the research questions.

Cases 4 and 5 are programmes of work within the West of England Academic Health Science Network; our role is to examine these programmes, the networks involved in their design and delivery, and their performance relative to the research questions.

Case 6 represents an early stage idea within the Enterprise and Translation theme. MSc Lean Systems, Supply Chain Management students conducted international research on Type 2 diabetes networks and provided written reports.

8. **Initial exploratory network maps for agreed case studies, subject to access**
   Access was agreed by a Task and Finish Group established to facilitate the research.

9. **Tested pilot of evidence framework and methodology**
   This has not been completed.

10. **Update / summary to the West of England Academic Health Science Network Board**
    A summary and report was provided to the board in August 2014 and this is the second report.

11. **Year 1 Report for the West of England Academic Health Science Network website**
    The format of this report is to be agreed.

12. **Ongoing exploration of feasibility to extend research beyond the West of England Academic Health Science Network region**
    Other Academic Health Science Networks have expressed interest in this research.

    **Year 2**
    - Academic Health Science Network, workshop
    - Evaluation data gathering and analysis
    - Produce Year 2 evaluation report and debate with the West of England Academic Health Science Network
    - Systematic literature review paper
    - Develop and test networking tools for collaboration across the West of England Academic Health Science Network

    **Year 3**
    - Industry workshop
    - Evaluation data gathering and analysis
    - Produce Year 3 evaluation report and debate with the West of England Academic Health Science Network
• Academic papers on healthcare supply networks, innovation networks and evidence-based management

Year 4
• HEIs impact workshop
• Evaluation data gathering and analysis
• Produce Year 4 evaluation report and debate with the West of England Academic Health Science Network
• Academic papers on healthcare supply networks, innovation networks and evidence-based management

Year 5
• Conference for Academic Health Science Networks, industry, HEIs
• Evaluation data gathering and analysis
• Produce Year 5 evaluation report and debate with the West of England Academic Health Science Network
• Academic papers on healthcare supply networks, innovation networks and evidence-based management

13. Recommendation

The Board is asked to:

13.1 Note the report.

Written by:
Christine Harland
Professor of Supply Strategy
Cardiff Business School
Cardiff University

Presented by:
Anna Burhouse
Director of Quality
West of England Academic Health
May 2015
## Research Team

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Person</th>
<th>Expertise</th>
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<tr>
<td>University of Bath</td>
<td>Prof Duncan Eaton</td>
<td>NHS senior management, procurement</td>
<td>Healthcare supply networks</td>
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<tr>
<td>University of Bath</td>
<td>Dr Steve Conway – Visiting Senior Fellow</td>
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<td>University of Bath</td>
<td>Dr Jens Roehrich</td>
<td>Governance at public-private interface Partnerships/collaboration Procurement</td>
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<td>Prof Lars Sundstrom</td>
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<td>Dr Rachel Churchill</td>
<td>Knowledge transfer Evaluation of effectiveness</td>
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<tr>
<td>University of West of England</td>
<td>Dr Wendy Phillips</td>
<td>Innovation in healthcare Evidencing societal value</td>
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<td>Jackie Barker, PhD student</td>
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<td>Prof Helen Walker</td>
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