Identifying the impact of research on performance outcomes and patient experiences: an allied health professional perspective

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Background
A Definition of 'Research Impact':

- 'the demonstrable contribution that excellent research makes to society and the economy'.
  Research impact embraces all the diverse ways that research-related skills benefit individuals, organisations and nations.

- (ESRC 2015)
Research is essential to deliver excellent patient care in the NHS

- To deliver the best possible treatments for patients we need evidence on “what works”
- Political duty and commitment to clinical research
- NHS Constitution: clinical research is “core business” for the NHS
- Opportunity to embed research as a front-line activity
Key approaches to assessing research impact -

Sandra Nutley University of Edinburgh Business School

Impact of research
- Single studies
- Research programmes
- Systematic reviews

Forward tracking
- Policymakers
- Practitioners
- Media
- Organisational research use

Evaluation of initiatives
- Target KTE interventions
- Centres promoting research use

Impact of initiatives to increase research use

Research use in ‘user’ communities

Tracking back
Evaluation of Initiatives-The most important drivers of impact are:

- Established relationships and networks with user communities
- Involving users at all stages with research
- Well-planned user-engagement and KTE strategies
- Portfolios of research activity that build reputations with research users
- Good infrastructure and management support
- The involvement of intermediaries and knowledge brokers as translators, amplifiers, network providers
<table>
<thead>
<tr>
<th>KEY PERFORMANCE INDICATORS FOR GROWING RESEARCH</th>
<th>IMPROVEMENTS ON THE BASELINE INDICATORS IN THE ORGANISATION 2014-2015</th>
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| 10% of clinical staff as academic participants and leaders - baseline identified as 12% | 62 clinical academic staff were identified (14% of the workforce)  
  - 6 New Principal investigators  
  - 2 NIHR clinical fellowships awarded  
  - 2 new staff leading within collaborative studies  
  2 new Physiotherapy research posts were established with new research funding. |
| 80% of staff aware of the importance of research to patients and service outcomes. | In a staff survey (as part of the annual staff survey) 97% of staff (n= 270 60% of all staff in the Directorate) identified themselves as in support of the initiative to continue to support clinical academic research and were aware of the importance of public and patient involvement in the generation of research proposals. |
| Increase level of patient recruitment to studies | Patient recruitment was not known previously and a target figure of 20 was used and this was 80% achieved |
| Two further portfolio studies | Two additional portfolio sites were opened and a further two as collaborations with other directorates |
| Increase the number of grant applications | Fourteen further grant applications were recorded and registered with the clinical research office with a value of over £550,000 |
| Increase grant based income to the Directorate | An income of over £300,000 was recorded and attributed to the Directorate. This represented the third highest figure in the Trust. |
| The range of successful academic collaborations, The number of publications and conference presentations | Collaborations across professions and university departments was patchy and dependent on individual participation  
  66 new publications reported on a new collection system introduced via the host organisation - an increase on 6% on the previous year |

Fowler Davis S (2015) *Going for growth; improvement in the infrastructural and management support for clinical academic research, BMJ QI* (in press)
Aims

- to demonstrate the impact of research activity on patients' experience and organisational performance in a single NHS provider setting
- to showing how research has had an effect on practice and a health economy across agencies/institutions.
Methods:
PPI to identify interest and scope of research impact

• Patient's experience of research
  - One patient Recognised NICE guidance meant that she no longer paid for a cancer drug

- One patient's daughter has a rare disease that was diagnosed as a result of a research trial

- One patient reflected on three generations of treatment for diabetes
Results:
Feedback grouped into three areas of concern

1. Clinical Effectiveness

2. Knowledge based services

3. Absorptive capacity
1. Clinical effectiveness

- "Research can prevent waste! E.g. Drugs dispensed/unopened and never used.
- "Research should prevent waste, equipment/medication".
- "Prevention of waste!"

- Increase in available/understandable information surrounding 1/ The condition/disease 2/ The treatment

- Making treatment or care more efficient or effective
- Saving money so that it can be reinvested into other developments

- “Reduced mortality providing quality of life is not compromised
- "Expect treatment to be most “acceptable” (i.e. least traumatic) and cost effective, consistent with latest research evidence."

- "Less invasive procedures providing outcome similar or better than previous approach"
- "Fewer side effects/more tolerable side effects"
2. Knowledge based services

- "Research should always inform practise and should always enable staff and patients to see tangible outcomes to practise."

- "Trust practitioners to be up to date with quality research affecting their practice – so can trust the information they provide, and treatment options proposed."

- "Expect any treatment I am offered will be based on most up-to-date evidence gleaned from good quality research"

- "Staff are aware of research findings"
- "I want my PRACTITIONER to be aware of research so they can use it to inform my treatment"

- "Ongoing short updates on the research process"
- "Being upfront out [? about] impact and dissemination measures"
3. Absorptive capacity

- "Is there a minimum expectation level of service that is offered at all levels of NHS care? If so is this national and how does it compare to international levels."

- "With continued improvement in service through in service through research. How do we know our treatment is as good as other hospitals in the UK and the world?"

- "Feedback/questionnaires that can capture the benefits to patient care to ensure that patients are informed about how the information/outcomes will be fed back and over what period of time/intervals that would be carried out."

- "It’s important for patients to know what the latest evidence/research there is to instil confidence in the service provided. “

- "Thinking about impact and dissemination at the study design phase"

- "When researchers present their study to PAG (Patient Advisory Group) making it clear that we want to see a plan for what next and dissemination."
Which ways would you find useful to know more about research impact?

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<tr>
<th>Ways of Communicating Research</th>
<th>Rating 1-8*</th>
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<tbody>
<tr>
<td>• Face-to face exchange between researchers and ‘users’</td>
<td>8th</td>
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<tr>
<td>• Education sessions for users</td>
<td>3rd</td>
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<tr>
<td>• Networks and communities of practice</td>
<td>1st</td>
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<tr>
<td>• Facilitated meetings between researchers and users</td>
<td>7th</td>
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<tr>
<td>• Interactive, multidisciplinary workshops</td>
<td>5th</td>
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<tr>
<td>• Capacity building in user organisations</td>
<td>2nd</td>
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<tr>
<td>• Web-based information, electronic communications</td>
<td>4th</td>
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<tr>
<td>• Steering committees for research projects/programmes</td>
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8 key strategies for sharing research outputs and outcomes (Mitton et al 2007)
Research impact assessment

**Outputs of Research**

- Service Improvement
  - Patients recognise changes
  - Outcomes of care enhanced
  - Innovation in response to changing need

- Active Researchers
  - Capacity and capability enhanced
  - Research performance
  - Career structure and accountability

- Clinical academic research
  - National policy platform
  - Investment and mechanisms to deliver

**Anticipated Impact**

- Clinical Effectiveness
  - Safer Care
  - Reduced Waste
  - Clinical Outcomes

- Knowledge based services
  - Knowledge exchange
  - Patient involvement
  - Leadership

- Absorptive capacity
  - Absorption of current external knowledge
  - Organisational performance
  - Boundary spanning

**Health and Wellbeing Outcomes**

Department for International Development. Guidance on using the revised logical framework, 2011
A smaller but significant focus on 'Life Outcomes'

• "Helping patients to lead a more “normal” life"
• "Evident outcomes – changes to practice to improve quality of life"
• "Improvements in health/life outcomes"
Research is important to patients- NIHR Survey (2015)

How important is it to you that the NHS carries out clinical research?

- Very/fairly important: 95%
- Not important: 1.4%
- Don’t know: 3.6%
- Not at all willing: 2.3%
- Very/somewhat willing: 89%

If you were diagnosed with a medical condition or disease, how willing would you be to participate in a study?

But are we asking patients about impact?
Limits

• This study is a preliminary assessment of 15 patient views on research impact.

• I want to pursue research that focuses on impact assessment as a predictive tool to identify improvements in health and wellbeing and even specific and sustained improvements in health care (Graham et al 2012).

• A sustained focus on research impact is on-going and further infrastructure is needed to engage AHPs in shaping research priorities (Pickstone et al 2008).
Bottom line

• Further bid to NIHR HSR&D to create a robust tool for research impact assessment

• A request for international partners to help to identify requirements for health and equalities impact assessment of research

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