

# THE R- AHP: THE DEVELOPMENT OF A SMARTPHONE MOBILE APPLICATION TO DEVELOP RESEARCH SKILLS IN CLINICALLY BASED ALLIED HEALTH PROFESSIONALS (AHPS).

## SUMMARY

### THE PROBLEM

- Research from AHPs is known to lag behind that of nursing and medicine resulting in a lower evidence base to services and care compared with other professions.
- DH policy focuses on the need for greater innovation in health care delivery. Research and intrapreneurial activity (corporate entrepreneurs) are inextricably linked.
- AHPs want research training that is delivered flexibly to meet both work and personal commitments. Current formal university research modules or courses are not meeting the training needs of clinical practitioners.

### OUR SOLUTION

- There is a clear need to meet the needs of AHPs that would like to develop their research skills through a more flexible learning method.
- Smartphone technology offers an opportunity to reach practitioners in the work place allowing clinical situations of relevance to be documented with input from supervisors/managers or even patients in a timely manner.
- The company MyKnowledgeMap have developed and tested a mobile app to document and record clinical assessments for health practitioners. We have adapted this mobile app to deliver a work-based learning research skills development package; allowing practitioners to synchronise their activities, blog entries and other tools at home prior to attending work making NHS firewalls no longer an issue for remote delivery.
- Using an intrapreneurial pedagogy as a lens through which to develop research skills we aim to enhance innovative behavior, hence developing services and care meeting current agendas.

### THE BENEFITS

- Increase practitioner experience and meet staff needs filling a current gap in skill development.
- An opportunity to reach practitioners with different learning styles (learners that prefer learning by doing models rather than traditional taught pedagogy)

## 1.0 BACKGROUND

“Universities must provide us with people with the ability to..... innovate and break the status quo, and to navigate in the unstable waters of the global economy”

David Docherty (Guardian 04/04/2012)

### 1.1.THE PROBLEM- A GAP IN AHPS SKILLS

There are over 130,000 Allied Health Practitioners (AHPs) working across a range of sectors in the UK; contributing critical expertise in a number of care pathways<sup>1</sup>.

Providing safe care to patients requires specialist knowledge and training currently provided through under-graduate degree training. To enhance AHPs capabilities within the workplace various masters programmes exist to contribute to continuing professional development and to augment career progression. However, research from AHPs is known to lag behind nursing, medicine and clinical scientists resulting in a substantially lower evidence base to services and care compared with other professions.

Research is inextricably linked to innovation and service development. The development and testing of novel treatments or interventions from AHPs will be restricted while a gap exists in AHP research activity. Commentators have recommended the need for investment in research training of AHPs not just at doctoral level but at all levels<sup>2</sup>. Furthermore, a gap analysis of research radiographers working in Radiotherapy (n=70) <sup>3</sup>identified 60% of research radiographers lacked skills in statistical analysis, and report writing, 45% lacked skills in research methodology, searching for evidence, and critical evaluation with over 90% reporting a lack of skill in grant writing. Discussion with research radiographers through national forums suggests this situation has not changed over the five years since this survey; and recent evidence from the SCoR survey supports this view. This demonstrates that even practitioners working within the research environment (in research roles) may lack the relevant skills to lead research activity and hence innovation in service delivery.

Many busy health professionals do not have time, funding, or the desire to access and complete formal University credited research programmes. Feedback from national research workshops for radiographers indicates a desire from practitioners to improve their research skills; but this needs to be delivered in a flexible way that suits practitioners working patterns and personal commitments. Research shows formal education increases the confidence of those moving into specialist roles<sup>4</sup> and hence formal education in research delivered in a flexible way should increase the opportunity for greater research and innovative activity.

## 1.2 CURRENT NATIONAL DRIVERS THAT FRAME THE PROBLEM

The Department of Health QIPP (Quality Innovation, Productivity and Prevention)<sup>5</sup> agenda requires practitioners to consider efficient and productive ways of providing safe care for patients. This agenda needs innovative, intrapreneurial practitioners across a range of professions to drive change. In addition, Health Education England's new Education Outcomes Framework consists of 5 domains; domain 3 is specifically related to the demonstration of a link between education and training and improvement and innovation in patient care. The DH publication 'Liberating the NHS: Developing the healthcare workforce' comments on the need for 'hardwiring innovation into the curricula of courses'<sup>6</sup>. Therefore, it is pertinent that educators of health care professionals consider relevant methods to foster the development of innovation and intrapreneurial skills. Intrapreneurship is an individual intention or drive to innovate within an organisation, developing and implementing novel solutions to organisational problems often in a 'bottom-up' way. Intrapreneurs can take an idea and develop it into a product or a service change that adds value or benefit to the organization

Developing and implementing innovative practices or interventions requires a combination of intrapreneurial and research skills. Undertaking research is in itself a form of intrapreneurial activity<sup>7</sup>. Intrapreneurial skills can be mapped against the researcher development framework<sup>8</sup> providing an intrapreneurial lens to researcher development.

### 1.3. DEVELOPING RESEARCH SKILLS THROUGH AN INTRAPRENEURIAL LENS

In order for AHPs to be effective they need to increase the evidence base for their practice and develop novel interventions, products or services. Evidence suggests that learning approaches that are designed around pedagogy that is relevant to intrapreneurship is most likely to develop skills for innovation<sup>9,10</sup>. We have developed an evidence based intrapreneurial pedagogy through a Higher Education Academy teaching grant (the 2INSPIRE project) that can provide the lens through which AHP research skills can be developed. Table 1 below identifies the components of the intrapreneurial pedagogy in practice as is applied to the development of research skills through the smartphone app.

Table 1 Application of intrapreneurial learning concepts in practice

Intrapreneurial Learning Methods	Application
<b>Learning by doing</b>	<ul style="list-style-type: none"> <li>• Task-based learning.</li> <li>• Tasks reflective of the activities undertaken by clinical researchers.</li> </ul>
<b>Learning from networking</b>	<ul style="list-style-type: none"> <li>• Participants required to use existing networks within their local employing organisation to gain understanding and perspectives on their proposed research.</li> </ul>
<b>Learning from mentors/role models</b>	<ul style="list-style-type: none"> <li>• Short audio files from intrapreneurs used to highlight strategies for overcoming barriers and challenges to innovation within the NHS.</li> <li>• Use of AHP researchers to comment on participant blogs and provide expertise from their research experiences</li> </ul>
<b>Learning from mistakes</b>	<ul style="list-style-type: none"> <li>• Opportunity to reflect on a previous research failure.</li> </ul>
<b>Learning through challenging tasks</b>	<ul style="list-style-type: none"> <li>• Tasks designed to take practitioners out of their comfort zone but with an opportunity for support through peer and moderated blog discussions.</li> </ul>

### SUMMARY OF THE PROBLEM

- Research from AHPs is known to lag behind nursing and medicine resulting in a substantially lower evidence base to services and care compared with other professions; a gap in research knowledge and skills exists within the Allied Health Professions.

- Current DH policy focuses on the development of innovation in healthcare requiring the development of innovative behavior and intrapreneurialism from AHPs.
- Research and intrapreneurialism is inextricably linked. Evidence shows that in order to develop intrapreneurial skills the pedagogy adopted needs to reflect intrapreneurial learning (learning by doing, learning from mistakes, learning from networking, learning from challenging tasks, learning from role models)
- AHPs want research training that is delivered flexibly to meet both work and personal commitments. Current formal university research modules or courses are not meeting the training needs of clinical practitioners, a smartphone app provides an alternative approach to engaging participants in developing a research proposal.

#### Reference List

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