



Oral Evidence for Health and Social Care Committee on behalf on South East Wales Academic Health Science Partnership (SEWAHSP)

The South East Wales Academic Health Science Partnership is a collaboration consisting of the 3 Universities; Cardiff, Cardiff Metropolitan and South Wales, the 3 University Health Boards; Cardiff and Vale, Aneurin Bevan and Cwm Taf and the 3 NHS Trusts; Velindre, Public Health Wales and The Welsh Ambulance Trust.

Our remit is to increase innovation and joint working between Universities, NHS and Industry. As such I am not in a position to address all the points of reference regarding NHS, commissioning and assessment procedures but can offer information on the ways in which academia engages with the NHS and industry; and how a partnership approach between the NHS, academic institutions and industry could be developed further and some examples of where this is happening in practice.

There are various groups within the Universities which engage very effectively with Industry and the NHS – sometimes these are individual Investigator led groups eg Prof Chris McGuigan’s group, sometimes larger initiatives such as the Arthritis Research UK Centre or the Wound Healing Research Unit and PDR (The National Centre for Product Design & Development Research). Another initiative was the Critical Care Alliance which was group of clinicians/scientists in the Sepsis field who formed a joint collaborative group which proved very attractive to Industry and directly led to gaining >£3M funding from TSB for 2 consortia including commercial groups.

The Health Technology Challenge Scheme

SEWAHSP have recently run a small scale pilot scheme aimed directly at forming new collaborations to address clinical problems through the Health Technology Challenge Scheme. This provided a *mechanism for interaction* between academic and clinical partners and an *incentive to participate* by making seedcorn funding available to support projects to solve the challenges (up to £25K). The scheme was two step process with the first being the establishment of an interactive website where participants could post their “challenges” and could view, comment and vote on all ideas posted. We then convened an expert panel to select a subset of challenges for which applications were invited, 7 challenges were selected and the call for applications issued. 4 projects have now been funded. The scheme cost under £100K in total and in terms of stimulating new project ideas and forming new connections and collaborations will go far beyond these four funded projects. Over 200 participants joined the website from across our partner organisations and beyond (we have some industrial members as well as university and NHS participants further afield), 21 challenges were received over 100 comments and votes submitted.

We are now actively in the process of further developing some of the ideas and challenges and forming project teams to apply for other sources of funding. We are also seeking funding for the next round and preferably to continue the scheme on a more regular basis and make

it Wales wide as this could easily be achieved with the current mechanism. The majority of the funding for the pilot was from the Intellectual Property Office Fast Forward Scheme, but as this is aimed at new initiatives would not be ideal for recurrent funding. The idea of an all-Wales scheme is proving to be a popular idea. Tenovus have expressed positive interest in taking an active role in the next round, on an all-Wales basis and the South West Hub of AHSC have offered their support with co-ordination. However, funding will be needed.

The Wound Healing Research Unit

This group led by Prof Keith Harding works very much at the interface of academia, clinical practice and industry with a pro-active focus on innovation to improve the treatments available for chronic wounds which are significant clinical problem and huge factor influencing the quality of life for patients suffering with an intractable wound. They work closely with industry running many clinical trials with new products for example:

WHRU has conducted 9 studies over the past 10 years for Convatec (part of Bristol Myers Squibbs). Including a randomised controlled trial of 131 patients, comparing AQUACEL[®] Dressing versus an alginate dressing, the following was observed:

- The mean wear time was significantly greater in the AQUACEL[®] Dressing group versus the alginate dressing group (P<0.001)
- Of the patients who healed, those in the AQUACEL[®] Dressing group healed 14 days faster than those in the alginate group (P=0.053)
- Ease of removal was rated by the investigator as excellent in 51% of the AQUACEL[®] Dressing group versus 24% in the alginate group (P=0.006)
- Ability to contain exudate was rated by the investigator excellent in 44% of the AQUACEL[®] Dressing group compared to 20% in the alginate group (P=0.002)

This dressing is now in regular use within the NHS.

Work with Photopharmica Ltd reported positive results from a WHRU Phase 2b study of Antimicrobial Photodynamic Therapy in the treatment of chronic leg ulcers.

In 2012, the WHRU undertook a clinical study commissioned by the National Institute for Health and Care Excellence (NICE) to determine the effectiveness of MIST ultrasound therapy compared to UK standard care for the treatment of non-healing venous leg ulcers. In this instance, the WHRU acted as the clinical experts in leading this clinical trial, which was independent from NICE, and the MIST manufacturer. This study is now awaiting a final report.

The potential of WHRU has been recognised with the formation of the Welsh Wound Initiative which should provide the ability to maximise the opportunities for innovation within this group.

Cardiff University

Cardiff University is presently addressing a significant innovation agenda through the development of its "Innovation System". The Cardiff University Innovation System will comprise the infrastructure and estate required to partner applied research of world-leading excellence that drives innovation with industry, government and other agencies. We will be

organising workshops in the new academic year to engage staff and industry to shape this work further.

A key part of this agenda is "Clinical Innovation" and a key focus is to further increase the University's engagement with clinical colleagues in order to identify clinical priorities which can be addressed by innovation for the benefit of patients and the health economy. This of course requires input from the private sector which opens up business opportunities and thus stimulates wealth creation particularly through alignment with the Welsh Government Life Science Initiative. Cardiff University and its Medical School in particular will drive the Clinical Innovation agenda by creating an environment to bring together clinicians, academics and industrialists. The Medical School has a strong tradition of innovation and will work with its existing innovators within this environment to convey ideas and best practice in order to encourage and provide leadership to others with potential to contribute to the success of the University's agenda. This environment will provide a key contact hub for organisations such as NISCHR and SEWAHSP.

Within this document I have tried to provide a few key examples rather than a comprehensive overview of interactions between industry, academia and the NHS. I will be happy to elaborate or expand further or provide more examples if this would be helpful and will be available to answer any questions at the committee meeting on the 6th March.