

Developing targeted technology to address unmet clinical need - Implementing a development and adoption strategy

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Despite healthcare professionals having a clear drive to innovate and create new medical devices and systems of care they have rarely been in the forefront of product development. As a result healthcare systems have received products and services "pushed" to them by industry. These products may not be aligned with the development strategy of healthcare organisations or address perceived needs.

Innovation is the successful implementation of new ideas and is divided into three stages: Invention, adoption and diffusion. Currently the Innovation/Adoption/Diffusion cycle for new medical devices is too long, taking an estimated average of 17 years for only 14% of new scientific discoveries to enter day-to-day clinical practice¹

In an attempt to address this situation in the UK the National Institute for Health Research has established eight Healthcare Technology Co-operatives (HTC), one of which addresses innovation related to unmet need in wound prevention and treatment². This HTC has specific aims:

- Act as a platform for innovation
- Identify and develop promising concepts for medical devices
- Provide theoretical, methodological and design expertise and a clinical base to develop these concepts into testable interventions and devices
- Test the feasibility, effectiveness, cost effectiveness acceptability of proposed innovations in NHS settings and various care pathways and promote the spread of best practice

To do this the HTC working through a formal networked collaboration between strategic partners and a network of key stakeholders (patients, patient groups, charities, and industry), will take a leadership role in identifying unmet need and developing and translating integrated clinical and research knowledge to patient care thereby improving the life of patients, enhancing standards of wound management and promotion wealth creation.

References

1. Westfall JM, Mold J, Fagnan L. Practice-based research--"Blue Highways" on the NIH roadmap. *JAMA : the journal of the American Medical Association*. 2007;297(4):403-6.
2. Vowden P. New wound care HTC launches. *J Tissue Viability*. 2013;22(1):19-20.