This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.
Healthcare Technology Co-operatives

Filling a niche in the English R&D landscape

David Kryl, Sonja Marjanovic, Siobhán Ní Chonaill, Helen Ridsdale, Ohid Yaqub

Prepared for the Department of Health (England)
The research described in this report was prepared for the Department of Health (England).

RAND Europe is an independent, not-for-profit research organisation whose mission is to improve policy and decision making for the public good. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2011 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND website is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (http://www.rand.org/publications/permissions.html).

Published 2011 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
Westbrook Centre, Milton Road, Cambridge CB4 1YG, United Kingdom
RAND URL: http://www.rand.org
RAND Europe URL: http://www.rand.org/randeurope
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org
Summary

The Department of Health has commissioned this evaluation of the pilot Health Technology Cooperatives (HTCs), which are part of its research infrastructure. Its purpose is to explore how this initiative has affected relationships between clinical, industrial and academic partners; how the HTCs fit into the current health innovation landscape; and the alignment of HTC activities to the goals set out in the NIHR strategy.

Since the HTC scheme was intended to focus on medical devices, this review investigated how medical device development is being pursued by other similar entities in England, Australia and the USA. The key question was whether the institutional relationships initiated by the HTCs are contributing to the health research system in England and if this scheme is the most effective way of pursuing these relationships.

This review had no specific theory or hypothesis to test, so information was gathered so as to allow key conclusions to be drawn and linked to existing theories. This review used documented evidence from the institutions involved as well as interviews. As the interviews are essentially a perceptions audit of senior people at the HTCs, we tried, as far as possible, to encourage interviewees to support the views they expressed and the claims they made with tangible examples. However, given our wider knowledge of the health research system, we felt that the claims made by interviewees were reasonable and credible.

The pilot HTCs, Devices for Dignity (D4D) and Bowel Function HTC (enteric), initially pursued different operational models: the former pursued a structured management model with defined roles within the management team, while the latter adopted more flexible management responsibilities. Both have now settled into formalised project evaluation systems, supported by wide-ranging stakeholder networks.

Both pilot HTCs have established a pipeline of products that range from near-market technologies to longer-term development projects and have found other sources of funding to develop these technologies.

Both pilot HTCs have reached the initial stage of becoming national services through the development of expert networks. There remain some issues with their level of profile, mainly due to the 'pilot' label, which may hinder the development of new relationships.

There is an identified need to engage NHS clinical staff and management in medical device development and also to encourage greater involvement of small companies. The HTC concept is currently the only medical device-specific entry point into the innovation pathway and both pilot HTCs have found enthusiastic NHS collaborators. Both HTCs agree that being hosted by a NHS Trust has been key to their progress.

All HTC-like organisations have found themselves dealing with unexpectedly high numbers of potential, and high-quality, projects, including some that may not have been identified otherwise. All are considered to be providing a unique service by their users, according to the interviewees.

All HTC-like organisations state that some form of Government funding is required to support basic administrative functions and initial scientist/clinician time. Currently this is obtained from charities, foundations, donors, or the Government.

Most other HTC-like organisations around the world serve a sustained function, with the exception of those in Australia which have fixed terms.

There is general agreement that intellectual property rights cannot provide a viable income stream for HTC-like organisations and that fee-charging could present a barrier to developing many new innovations.

The pilot HTCs have shown that there are different, but equally legitimate, management approaches to the clinician-industry-patient relationship. These different approaches are reflections both of the disease field and the host institution culture. Neither HTC has concluded how best to sustain activities in the long term, particularly core management facilities such as supporting initial meetings with potential partners and early development of technologies from non-commercial sources.

These core HTC activities are unlikely to attract private sector funding as they are providing a ‘public good’ in their initial contact and evaluation stages.

Core funding should cover the costs of full-time staff for project management and relationship management, with part-time funding for administration and both clinical and research leads. Funding must also cover clinical evaluation time, including that of specialists whose roles are difficult to replace at their host institutions.

Given the remit of the HTCs and the experiences of those managing them, it would be appropriate for competition-based Government funding to cover core management functions which, for medical device innovation, seems to be a key public good.