

HaCIRIC's Research and Goals for Phase 2

Strengthen Evidence > Optimise Decision-Making> Sustain Implementation> Rethink Procurement

HaCIRIC is now in its second phase, following our successful refunding in May 2011 by the Engineering and Physical Sciences Research Council. In this next phase, we aim to continue our work to improve healthcare service and infrastructure reconfiguration and operation. Doing this job is essential in meeting the challenge to provide safe, effective and efficient healthcare at a time of zero budget growth.

We are **strengthening** the collection of **evidence** and we are combining this with simulation and modelling of different service and infrastructure solutions. This will help to **optimise decision-making** in health services and policy.

For example, we are gathering extensive and robust evidence on how healthcare environmental design can improve facilities. That involves researching multiple variables such as heating, lighting or ventilation. We order that knowledge into easy-to-use models to optimise planning, design, construction and management of healthcare facilities.

Our evidence and model-supported approach also focuses on improving urgent and unscheduled care delivery. We are assessing the impact, value and resilience of innovative healthcare technologies and organisational changes in this field. Our modelling and simulation studies in stroke care, emergency care, renal care and A&E are helping to analyse and assess approaches developed in each area. Healthcare acquired infection also continues to be a major concern. Our research is helping to optimise facility design, people movement and cleaning regimes.

We know that analysing problems and solutions is not enough - improving a process is not just about garnering and publishing the evidence. We must also **sustain implementation** of that knowledge on practice. This has led us to challenge a field that, historically, has tended to offer simplistic explanations for the adoption of innovations. Our research highlights the need to understand the difficult environments into which healthcare innovations are projected. So we are looking at health system complexity; payment and reimbursement models; organisational cultures and behaviours; evidence-based decision-making; communications and social networks.

For example, we are researching how healthcare planning and infrastructure decisions are *actually* made. We are investigating 'change agents' – how and why key people make a difference – and the way evidence is used to support or hold back implementation decisions. Important insights are emerging from our case studies of three new hospital developments in the UK, US and Canada.

We also aim to **rethink procurement** of healthcare infrastructure and services. We are examining innovative PPP models, mainly in Europe, where suppliers provide not only accommodation and related services but also some clinical services. These examples have contractual and financing models that incentivise suppliers to secure key objectives such as enhanced quality.

HaCIRIC's Phase 2 programme goes to the heart of the issues facing modern healthcare systems. It is supporting well-evidenced, smart decision-making that will help to transform healthcare in the future.