PRIORITY AREA D
CONNECTED HEALTH ACTION PLAN
JULY 2013

Connected Health (Priority Area D)

Context

Connected health and independent living technologies are technologies that facilitate remote delivery of healthcare and assisted living, moving the emphasis of care to the patient in their own home. This is an emerging area with the potential to transform healthcare and service delivery, thereby reducing burdens on health systems and improving the quality of life and independence of our ageing populations.

Products which emerge are likely to be the result of convergence of medical devices, diagnostics and sensors with information and communication technologies, guided by clinicians, patients and home-care specialists. Development of connected health and independent living technologies (including silver technology), requires a cross disciplinary approach involving many research disciplines and sectors, and Ireland has the research and enterprise capability to develop solutions in this area. Consumer-driven innovation is also expected to be a major factor in technology development.

Acknowledging that research in health can benefit both the economic and societal/health agendas, it is clear that the realisation of the full potential of Connected Health research and commercialisation requires the engagement of the health system. While continued investment in research in population health sciences, health services research, integrating clinical infrastructure and translational research will be required, it is important to recognise that this investment has a dual purpose. On the one hand, these research areas enable the generation of evidence to inform policy, improve clinical practice and create opportunities for improved healthcare delivery and better health outcomes. At the same time, research in these areas can benefit the wider economic agenda which aims to further develop the healthcare industry in Ireland for the domestic and potentially international markets. It can do so by strengthening the infrastructure, capability and capacity that will enable, inter alia, the identification, development, validation and potentially the adoption of enterprise outputs within the health system.

The RPSG report identifies an opportunity to position Ireland as a leading location for developing connected health solutions. It will, therefore, be necessary to go beyond research alone to realise this opportunity; it will require the collaboration of all relevant stakeholders (the health, system, industry, academia etc.) in the connected health area to solve problems in the delivery of healthcare and also address the wider societal aims including innovation and jobs.

Connected Health

Vision/opportunity: Ireland as a unique environment for the development, validation and implementation of connected health solutions

- Building on research strengths in ICT and the life sciences
- With engagement of all relevant stakeholders (healthcare professionals, patients, enterprise, academia, Government, etc.)

Objective 1	Identify areas of overlap between multidisciplinary research strengths and health system needs where pilot connected health solutions might be developed
Objective 2	To implement effective mechanisms for industry engagement with the health system for exchange of ideas and trialling products
Objective 3	To ensure the necessary clinical infrastructure is in place to support the development, trial and validation of connected health solutions
Objective 4	To ensure a strong supportive regulatory environment for development of connected health technologies, products and services
Objective 5	To ensure any skills gaps in supporting the development of connected health solutions in Ireland are addressed

No	Action	Deliverable	Benefit	Lead	Support	Timeline
Objective 1	Identify areas of overlap between multidisciplinary research strengths and health system needs where pilot connected health solutions might be developed					

No	Action	Deliverable	Benefit	Lead	Support	Timeline
D1.1	With input from the health system, identify discrete areas of need where Ireland can develop technology and enterprise capability and prioritise development of a small number of pilot connected health initiatives	1. Priority research areas and market opportunities identified. 2. Demonstrator projects initiated.	Opportunity for alignment of appropriate elements of the public research investment with clinical and market need. Positioning Ireland as an attractive location for development of connected health solutions.	EI, IDA, SFI, DOH, HSE, DJEI	Healthcare innovation hub	Q4 2013 Q1 2014
D 1.2	Establish Connected Health Technology Centre	Technology Centre in place working with clinical and enterprise sectors	Accelerated development of novel Connected Health products and services in priority areas identified in 1.1 Sound scientific evidence of the quality and safety benefits of connected health solutions to support business case for investment in this area	EI, IDA,	SFI	Q4, 2013
D 1.3	Continue to fund excellent research underpinning Connected Health through bottom-up calls	Strong research base in platform science and technology underpinning Connected Health	Ireland remains competitive and well positioned to respond to (short), medium and long term opportunities and research demands arising through disruptive technologies and new product	SFI		Q1, 2013

No	Action	Deliverable	Benefit	Lead	Support	Timeline
			direction.			
D 1.4	Showcase Ireland's research and enterprise capability in eHealth as part of EU eHealth Week 2013	Showcase event during EU eHealth week 2013		DOH, EI, IDA	SFI, HRB	Q2, 2013
Objective 2	To implement effective mechanisms for industry engagement with the health system for exchange of ideas and trialling products					
D 2.1	Establish the Health Innovation Hub	Deliver demonstrator project to assess feasibility in the first instance.	Vehicle to (a) facilitate industry and healthcare system engagement to develop and validate products and services informed by health needs and (b) support adoption and commercialisation, as appropriate of new innovations.	Innovation Hub Project Team	EI, IDA, SFI, DJEI, DOH, HSE	Q4, 2014
D 2.2	Investigate the potential for collaboration with the Connected Health Ecosystem in Northern Ireland	Areas for collaboration identified	Leverage national investment through partnership with research programme in place in NI.	EI	IDA, SFI, HRB	Q3, 2013

No	Action	Deliverable	Benefit	Lead	Support	Timeline
D 2.3	Explore the potential for establishment of a similar Connected Health Ecosystem in the Republic of Ireland	Report on the benefits and rationale for the establishment of a Connected Health Ecosystem in Ireland	Integrated collaborative environment for the development and validation of connected health technologies and services	DOH	EI, IDA, SFI, HRB, HSE, and other relevant stakeholders	Q4, 2013
Objective 3	To ensure the necessary clinical infrastructure is in place to support the development, trial and validation of connected health solutions					
D 3.1	Publish Health Information Bill	Publication of Health Information Bill	A legal framework for the introduction of an individual patient identifier. Provision for identifiers for provider organisations. Supporting a conducive environment for health research in Ireland by streamlining the ethics approval process for health research not governed by statutory regulation and EU Law.	DOH		Q4, 2013
D 3.2	Ensure development of an appropriate national eHealth strategy.	Publication of National eHealth strategy	Support development and adoption of connected health solutions in the healthcare system	DOH	EI, IDA, HSE, HRB and all other relevant stakeholders	Q4, 2013
D 3.3	Increase capacity for, and	Knowledge base around	Uptake and implementation	HRB	HSE/DOH, All	Q4, 2016

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	investment in, high-quality Health Services Research that examines how social factors, behaviours (patient and/or clinician), organisational structures, business processes and/or financing systems impact on access, uptake, use, quality and cost of healthcare (e.g. HTAs and services provision costs) and healthcare interventions	usability and barriers to uptake of new technologies in healthcare and evidence around quality, cost and implementation.	considerations built into product development and evaluation.		other relevant funders & stakeholders	
D 3.4	Continue investment in Population Health Research that focuses on behaviours and lifestyle factors, and on prevention and health promotion strategies for specific populations or groups	Knowledge base around the needs, behaviours and lifestyle of specific populations groups (e.g. older people, people with disabilities)	Generation of and evidence base for prevention and health promotion strategies Opportunity for better input into product development for targeted groups.	HRB	DOH/ HSE All other relevant funders & stakeholders	Q4, 2016
D 3.5	Build capacity within the health research system to address specific skills deficits in population	National structured PhD programme investment in relevant disciplines. Investment in post-doctoral	Timely and relevant research evidence to address cost, quality, effectiveness and implementation issues	HRB	HSE, DOH, HEIs, HEA, Medical charities	Q4, 2016

No	Action	Deliverable	Benefit	Lead	Support	Timeline
	health sciences and health services research	research capability at trainee, fellow and senior fellow levels Investment in new senior research leadership capability Investment in projects, programmes and centres	Increased capacity in the health research system from current low base Development of multi- and inter-disciplinary approaches to health challenges Health system partnerships provide greater opportunities for evaluation and commercial exploitation of a range of health care interventions			
D 3.6	Establish health research networks to increase capacity for collaborative working within and between health specialisms	Health research networks established. Access to large-scale and multi-site patient cohorts for health research	Increased capacity to generate research evidence to clinical practice. Access to research for patients.	HRB	HSE, EI/ DA/ SFI and others	Q2, 2014
Objective 4		To ensure a strong supportive regulatory environment for development of connected health technologies, products and services				
D 4.1	Ensure regulatory bodies are resourced to respond to development of connected health technologies.	Strong supportive responsive regulatory environment for connected health products	Increased attractiveness of Ireland as a location for development of connected health solutions	NSAI/IMB	EI/IDA/NDA	Q4, 2012

No	Action	Deliverable	Benefit	Lead	Support	Timeline
D4.2	Leverage existing investment in regulated software to develop national competence to support software development for medical device /connected health applications in compliance with EU Medical Device Directive and potentially FDA.	Briefing of industry when new regulations are finalised for software	Industry operating to new standards	NSAI/IMB	EI/IDA/NDA	Q4, 2013
D4.3	Broaden stakeholder participation in eHealth Standards Advisory Group (eSAG) to include representation from PAG as an observer	Membership of eSAG extended to include PAG representative	Standards prioritisation work of eSAG reflects priorities for Connected Health thereby enabling the market particularly for SMEs	HIQA	PAG	Q1, 2013
D4.4	Broaden stakeholder participation in NSAI Health Information Standards Committee to include representation from PAG as an observer	Membership of NSAI Health Information Standards Committee to include PAG representative	PAG representative acts as a conduit for the bi-directional exchange of relevant information from the Standards Committee to the industry and academic communities	NSAI	PAG/NDA	Q3, 2013
Objective 5	To ensure any skills gaps in supporting the development of connected health solutions in Ireland are addressed					

No	Action	Deliverable	Benefit	Lead	Support	Timeline
D5.1	Increase supply of necessary skills in health informatics	Sufficient supply of health informatics skills	Sufficient resources to support eHealth initiatives in Ireland	DES, HEA, DOH, HSE		Q4, 2016
D5.2	Provide healthcare professionals and all staff in healthcare delivery, management, administration and support with appropriate arrangements to access professional development services relevant to the provision of connected health solutions.	National Healthcare Informatics Skills Development Board National Healthcare Informatics Skills Development Strategy Plan to provide healthcare professionals and all staff in healthcare delivery, management, administration and support with appropriate arrangements to access professional development services relevant to the provision of connected health solutions Establishment of engagement and	The development of Healthcare Informatics skills to enable the utilisation of connected health solutions in the delivery of optimum health and social care The development and utilisation of Healthcare Informatics to support job function/task activities amongst all staff in the healthcare industry Increased awareness of Healthcare Informatics for all Healthcare staff Statement of the ICT resources and skills requirements for the implementation of National	HSE	DOH, DES	Q4, 2013

No	Action	Deliverable	Benefit	Lead	Support	Timeline
		collaboration process with the wide stakeholder group of the 3rd level education sector (universities, IoT's), government policy makers – Dept. of Health, national training and employment agency (Solas), executive bodies (HSE), professional bodies (ICS, HISI) and HIQA.	Healthcare ICT strategy and the support of healthcare ICT operations A register of skill-base within academia and Health IT Sector A mechanism for private sector employers and the public health sector to identify and address emerging skill gaps in the future Compliance with EU Directive R - (90) 21			
D 5.3	Establish/source/adapt a career-focussed healthcare ICT framework (or standards infrastructure like UK-CHIP/I-CHIP) from pre-service training through a variety of roles to senior	Career-focussed healthcare informatics skills development/training framework and standards infrastructure based on The European e-Competence Framework.	Formal accredited Healthcare ICT competencies and skills curriculum and curriculum matrix to underpin the development of healthcare informatics education, training and development.	HSE	DOH, DES	Q1, 2014

No	Action	Deliverable	Benefit	Lead	Support	Timeline
	professional position.		A mechanism to assess the potential and skills requirements of healthcare staff and enable their retraining and up skilling to facilitate redeployment. An ICT skills and career development program based on and utilising an accredited skills curriculum Efficiency of using an existing framework as basis for the description of the competencies of all staff A European recognised standard of Healthcare ICT excellence			
D5.4	Build capacity within the health service to identify skills and knowledge deficiencies across the service and develop competence in ICT disciplines, skills and knowledge relevant to improved patient outcomes and safety	Resourced national initiative to promote and develop Healthcare Informatics Education, Training and Skills encompassing the arrangements (5.2), tools (5.3) and implementation (5.4) of the National Healthcare Informatics	The resources to identify skills and knowledge deficiencies across the service and develop competence in Healthcare Informatics disciplines, skills and knowledge relevant to improved patient outcomes and safety within a high quality and cost effective	HSE	DOH, DES	Q2, 2014

No	Action	Deliverable	Benefit	Lead	Support	Timeline
	within a high quality and cost effective service delivery environment	Skills Development Strategy A register of Health Informatics Professionals (I-CHIP or EU-CHIP model), introducing the concept of fitness to practice appropriate to the level of the job role.	service delivery environment Statement of Healthcare Informatics roles and functions Statement of skills assessment Gap analysis to identify Healthcare Informatics skills/resource deficiencies nationally and internationally Statement of the Healthcare Informatics resources and skills requirements for the implementation of National Healthcare strategy Training & staff development requirements determined Status of professionalism in and Health Informatics and its components, including eHealth Clarity of competence and professionalism of all health			

No	Action	Deliverable	Benefit	Lead	Support	Timeline
			sector workers			
			Workforce able and willing to implement connected health and other IT solutions in the health service			
			Wider awareness of the value of eHealth solutions and thus a reduction of the fear of such solutions replacing traditional patient care.			