

A Manifesto for Connected Health

Delivering Leadership Value

Maintaining Healthcare Values



‘A Manifesto for Connected Health’

A summary of the proceedings and outcomes

of

The Connected Health Leadership Summit

Belfast, Northern Ireland

6th & 7th May 2009



www.echcampus.com

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Introduction

Healthcare is a complex, multi-faceted, dynamic area that is usually the largest user of economic and intellectual resources for communities and nations.

Improvements in health outcomes in wealthier societies no longer correspond to economic growth – and in the poorer developing world the infrastructure for relatively basic healthcare is often unavailable or unaffordable.

The demographics of aging populations, citizen expectations of higher quality healthcare, new scientific and technological developments, the complexities of healthcare management and the diversity of demands from across societies of differing levels of equality, unless carefully handled, could conspire to increase both (a) health and well-being disparities and (b) the pressures on healthcare delivery systems and the people they are designed to serve; a wide range of actors including governments and community leaders, clinicians and healthcare workers, healthcare enterprises, employers and citizens.

If we continue to attempt to deliver healthcare in the traditional manner, then, even on the most conservative predictions, chronic care alone will, across the EU, by the year 2060, cost three times the current *overall* spend on healthcare.

This Manifesto for Connected Health reflects the work of delegates at the 2009 Leadership Summit – bringing together commercial, clinical, academic and governmental viewpoints to provide the ECHCampus with a framework for projects and priorities through to 2011.

Multifaceted challenges demand multifaceted responses – from encouraging lifestyle changes and individual responsibilities through to global sharing of knowledge and investment in infrastructures to enable resource linkages.

Connected Health is a large concept reaching across and beyond this complex healthcare landscape. The potential for point solutions – the use of networked technologies to reduce costs and enhance quality – is well-understood if not yet widely or effectively exploited. Even the ‘relatively simple’ matter of boosting medication compliance can deliver substantial benefits and underwrite the viability of infrastructure investment.

Beyond the myriad of small pilot schemes and localised ‘E’, ‘Tele’ and ‘Cyber-segmented’ projects (all challenging and inspired initiatives that are themselves complex to implement and constrained by infrastructural shortcomings) we see a bigger picture for which the label ‘Connected’ has a broader meaning; *facilitated* by networked technologies but driven by a wider and deeper understanding of regional and global healthcare agendas and societal needs.

The development of Connected Health, in its various forms, should in large part be driven by a patient/citizen approach – not led by technology – and designed to deliver value but not compromise the essential *values* of healthcare delivery.

It is not surprising that healthcare management is studied by anthropologists. Solution design requires close attention to human factors, and the fine granularity of healthcare specialisms is apparent in the sector’s tribal tendencies - driven in large part by the need for professional standards and accountability.

It is onto this complex landscape that advocates of Connected Health seek to build collaboration, knowledge sharing, innovation and enterprise at a scale sufficient to match the urgency of the need for transformation of healthcare delivery.

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Government finance ministers and health policy makers need to be supported to make sense of the new potentials for technology in healthcare in order to better develop a comprehensive management view.

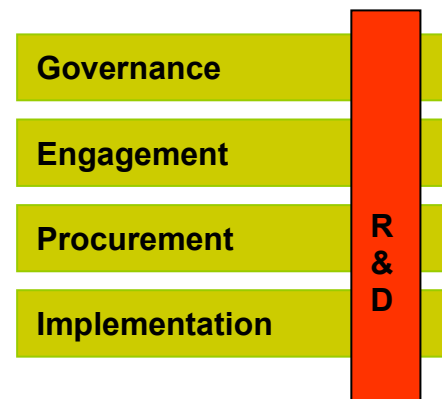
Knitting these technological strands into the wider *pre-existing* fabric is not the point of Connected Health. *Enabling* the strands to be woven together – to fashion healthcare fabrics to fit individual and societal needs as they emerge – is, however, the larger and more relevant challenge. Much as studying an individual strand or thread in a tapestry provides little insight, it is only by looking at the complete work that one can see the unity and symmetry across the entire piece.

This Manifesto for Connected Health, therefore, resists the temptation to focus on individual technical threads. We look instead to focus attention on four areas of endeavour: Governance, Engagement, Procurement and Implementation.

Across each of these themes we have sought to identify the actions needed to enable the knitting: to build the infrastructures, to understand the needs, to learn from practice, to share the knowledge, and to accelerate the effective, appropriate, and timely, development of Connected Health markets and practice.

This Manifesto summarises the outputs from the Connected Health Leadership Summit held in Belfast Northern Ireland, May 2009, and will inform the direction and priorities for the work of the European Connected Health Campus and its members and alliance partners over the next 2 years.

The Leadership Summit, the work-streams, the inputs of informed delegates and the production of this Manifesto has been made possible by the willing participation and collaboration of many actors – and the process has in itself formed and tested new linkages, new bonds and, we hope, new and timely perspectives for Connected Health.



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Governance

Healthcare is a regulated sector where safety is of paramount concern and is founded on a series of trusted relationships.

Accordingly, it is vital that governance relevant to the current provision is replicated and enhanced in the offerings of all 'Connected Partners'.

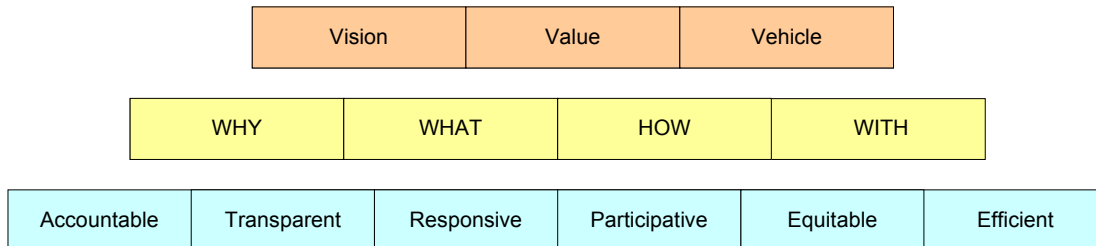
The European Connected Health Campus must demonstrate strong leadership in this area by adopting a transparent and rigorous policy on the governance of its internal workings, external activities and partnerships.

It is essential to recognise the differing legal, policy frameworks and priorities surrounding activities relating to Connected Health in different EU countries and also to recognise and include privacy, safety, diversity, cultural and dignity aspects .

Without effective governance there is always a risk of adverse events to the citizen, the patient and their carers.

Governance must also extend to and deliver effective data protection principles embracing difficult areas such as 'Consent' and the correct labelling and attribution of legal concepts such as 'Data Processor' and 'Data Controller'.

Effective Governance must apply equally to all actors in Connected Health allowing transparent decision making between Citizen, Patient, Carer, Provider and Commissioner.



We propose that at the earliest stage a clear statement of Governance principles is written.

This statement will be specifically tailored for an European Audience and authored in collaboration with the Continua Healthcare Alliance

This statement will also form the basis of a governance scorecard methodology, which may be given to campus partners to help them better assess their abilities to comply with good governance principles.

Systematic use of the scorecard will allow the integration of sound governance at every level and lead to 'Governance by Design'.

The tools should be supported by repositories of current examples and reference material as well as appropriate reference implementations.

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Engagement

The complexity of the healthcare delivery arena, and the wide range of actors and stakeholders, creates a major challenge for collaborative dialogues.

The transformation of healthcare delivery requires that roles and responsibilities will change, to provide more personalised and responsive services, enabled by effective and supportive technologies, in particular for those with long-term conditions and disabilities. In practice this will mean placing the individual at the heart of a range of services, empower self-management and over time changing the relationship between patient and doctor/nurse/carer from today's episodic and directive approach, to one that is based on continuous care and inter-personal collaboration.

Successful engagement with the stakeholders will require the following:

- Acknowledgement amongst stakeholders of the unsustainability of today's healthcare models, and agreement on the need to act now, in a strongly collaborative way.
- An understanding of effective and relevant methodologies for consultation and dialogue between different types of actors/stakeholders.
- A body of evidence, scientifically endorsed wherever possible, to show that telehealth and other assistive technologies are effective in reducing the cost of care whilst improving its safety, quality and outcomes, especially the quality of life of patients.
- Promotion of the value of large-scale adoption to reap the benefits – in contrast to small-scale, unsustainable and non-interoperable pilot schemes.
- A clear vision of what services could be enabled over the next 5 years (e.g. remote patient monitoring, medication compliance, remote consultation, online education), along with a statement of the potential benefits seen by each stakeholder.
- A roadmap to indicate significant steps that can be taken now, backed up with real-life examples of where progress has already been made.
- Discussion with healthcare payers about how the funding can be secured and allocated to make Connected Health a conventional part of healthcare delivery.
- Exploration with stakeholders about the potential for secondary use of health data, e.g. in medical and translational research, to improve overall population health

The European Campus for Connected Health can play a crucial role in addressing the above by:

1. Acting as a European focal point for information collection and dissemination about new concepts, as well as successful projects and initiatives from around the world
2. Facilitating collaboration of stakeholders and relevant organisations around selected projects which are likely to deliver the largest benefits at the earliest opportunity
3. Creating guidelines and standards for 'best practice' in connected health, including a programme of recognition and awards for leading innovators
4. Acting as a collective source of expertise on the role and value of Connected Health in modern, reformed, healthcare systems.



Procurement

Our analysis starts with asking the question: ***‘Are we equipped and ready to procure Connected Health solutions on a scale commensurate with the size and urgency of the task ?***

We propose the development of a ‘Capability-Maturity Model’ that will include definition of a variety of the ‘stages’ or ‘levels’ of organizational status as it relates to Connected Health. The objective is to assist organizations understand areas of internal evaluation and their need for preparedness in order to incorporate connected health into their workflow and to assist them in identifying what actions or best practices they might consider prior to procuring more advanced Connected Health solutions. The Model would include consideration of topics such as:

- The degree of professional acceptability
- The availability of an EMR system
- Whether the care model can be described as a system
- The extent of understanding of Rules Based Medicine’
- Whether funding mechanisms exist to cover the cost of change

This model would additionally need to be supported by a Taxonomy of Solutions – i.e. a common language defining methods for procurement of Connected Health solutions with consideration being given to Asset vs. Service procurement and ‘Best of breed’ vs. Integrated Solutions. This should be combined with a definition of the different types or gradations of connected health solutions.

An additional undertaking could be an assessment of whether the taxonomy can assist groups in understanding the correlation between organizational considerations and the different forms of Connected Health solutions with the goal of providing organizations a road map to match the scope of solution best aligned with their status.

Finally, in preparedness for procurement, we should expect to see an identification and acknowledgement of the roles of different stakeholders: Patients, Providers, Payers, Politicians, and Physicians.

From this analysis it is clear that there is a role for the European Connected Health Campus in fostering the education of the procurement community through the further development and promotion of the taxonomies and the Maturity-Capability models.

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Implementation

The Goal of the Implementation Group is to move the timeline back on acute healthcare and drive connected health to scale.

We will focus on short, medium and long-term tangible actions that increase awareness and decrease barriers.

In the short term, we will:

- Compile an inventory of European and US connected health projects
- Identify and understand the related health and clinical management issues.
- Identify and analyse the principle barriers to adoption and describe ways in which they can be addressed.

Key medium objectives are:

- Selling and marketing the benefits of connected health by educating key stakeholder groups, including: healthcare providers, policy makers, payers, and citizens.
- Defining an agreed-to methodology and framework that can be fed back into regulatory bodies and decision makers.

In the long term, we will create the 'Continua of Evidence Base' by identifying and driving a 'common currency'. We will drive the adoption of this new framework by working with, and feeding back to, existing organizations. The new evidence base structure will be stratified and tailored to stakeholder groups:

Policy	Cost per patient, Value for money
Payer	Reduced Cost
Clinician	Empirical Evidence
Citizen	Satisfaction, Quality of Life, Access

Lastly we will work to align structure and incentives to this new framework and ensure that perverse measurements and their implications are identified as such.

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Summary and Actions

In the relatively short time between the launch of the European Connected Health Campus and the Leadership Summit the distance we have travelled can be measured by the depth of work reflected in this Manifesto for Connected Health when compared to the original call for input shown at Annexe 1.

We recognise that the views of the four separate work-streams include many common themes and proposals. It is also apparent that the outputs reflect many of the significant inputs from the keynote speakers whose presentations and papers are recorded elsewhere.

As became clear at the conclusion of the Leadership Summit, the production of this manifesto marked a beginning of a process that we can now plan to develop.

Our immediate priorities will be to:

Prepare, for approval by our members and partners, a **Governance** policy for the ECHCampus that will also inform further work in association with the Continua Healthcare Alliance for wider development and propagation of governance principles and practice across the global Connected Health community.

Commence work on the **Engagement** agenda by initiating a major European Connected Health Awards programme for culmination in Q4 2010 with a large-scale event in Brussels. This programme will be scheduled for definition and announcement in July 2009.

Form an ECHCampus co-ordinating group to further develop the **Procurement** 'Capability-Maturity Model' and prepare materials for a major initiative in Connected Health Procurement awareness, training and support.

Develop, in association with the continuing **Implementation** Work-Stream participants, a web-based platform to address the Connected Health inventory task and seek funding to commission analysis of Connected Health project outcomes and provide input to the Procurement coordinating group on methodologies for Knowledge Transfer.

Acknowledgements

The work of the European Connected Health Campus (a Community Interest Company) would not be possible without the generous collaboration of our Members and Alliance Partners, our International Advisory Panel and a wider community of opinion formers drawn from government, healthcare organisations and research institutions.

The collaborative contributions of all participants in the manifesto work-streams at the Leadership Summit is gratefully acknowledged. Further details can be found at www.echcampus.com.

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ANNEXE 1 – The original call for participation (issued 23 March 2009)

Few analysts would disagree, even in the current global recession, that the fundamentals of Connected Health match the pressures for healthier societies and economies as never before. So it is not surprising that innovators and investors, researchers and healthcare professionals are upgrading their focus on Connected Health.

“What actions will best accelerate the development and practice of Connected Health ?”

Our first European Connected Health Leadership Summit addresses the urgent pressures for rapid and effective implementations of Connected Health systems and services. It is designed to look at the emergent market, ask the big questions, and bring together the business brainpower to provide direction.

The Connected Health leaders gathered for this Summit will work together to produce **The Connected Health Manifesto** – essentially the 2009-2011 framework for projects and priorities within the European Connected Health Campus.

The Manifesto’s four core themes will each be led by one of our Foundation Members or Alliance Partners. They in turn will invite other members and delegates to work together (both before and during the Summit) to shape the Manifesto.

Governance: The European Commission now sees eHealth developments as reaching a maturity that requires European-wide governance. Member States are considering their responses. With a strong industry and research perspective we need to think through what style of governance and regulation would best encourage innovation, accelerate market growth and ensure effective Connected Health practice.

Engagement: Clever technologies do not alone make complete solutions. Where are the exemplars that can guide education and engagement with citizens, patients, clinicians, policy developers and the media in the process of transforming roles and responsibilities? The growth of technology-enabled family care may be welcome but how might professional attitudes towards liabilities align with healthcare delivery environments where responsibilities are shared in new ways?

Procurement: Major procurement exercises demand good value, healthy competition and rigorous, transparent, processes. In a dynamic fast-evolving market how well do the overhead costs and timescales of these processes match the need for innovation from small specialist providers? In a European market of many small-scale projects how can researchers, manufacturers and service providers deliver economies of scale?

Implementation: The Connected Health arena is vast, the capacity for action is diverse, the perceived priorities for Connected Health are locally informed. What are the dependencies in standards and access network infrastructures that must be resolved to enable flexible and responsive implementations? How do we ensure knowledge transfer and shared experience?

Within each of these four core themes is a required focus on **Research and Development**. Headline-grabbing nano-technologies may capture popular imagination but, from an industry perspective, the heavy lifting of market creation, eco-system development and large-scale delivery depends on understanding the economics of healthcare and a wide range of complex issues including the impacts of societal inequalities. Whilst seeking scientific excellence, will the balance of research funding ensure that practical and effective delivery is informed by the everyday experience of healthcare professionals, systems vendors and societal attitudes?

