‘integrated care and healthcare innovation: tools or systems?’

Dr David Somekh

European Health Futures Forum (EHFF)
The European Health Futures Forum (EHFF)  
(see [www.ehff.eu](http://www.ehff.eu))

Who are we and what do we do?

A small European not-for-profit network organisation registered in 2013 and run by four directors from UK, Ireland and Oregon with extensive experience in healthcare (clinically, managerially and policy-wise), digital sciences and education/business management. We now have a virtual community of some 60 professionals from 15 EU countries who support the organisation and are partners with EU organisations such as EFPC, ECHAlliance, EHMA etc.

Our rationale? The current model of health and healthcare provision is broken – it’s not sustainable, but people continue to try and fix it, rather than to look to alternative models for the future.
So we offer ideas/conversations, support innovation where we detect it, scan the horizon, take part in projects and grow our network.

What we see as the four levers most likely to bring about transformation in European health and healthcare:

- Patient empowerment
- eHealth
- Disruptive innovation
- Transforming health professional education
"He texted his first word today."
We live in a digital age.

We have all adopted smart phones so rapidly that we forget that most of us have only been carrying a small mobile computer in our purse or pocket for about 7 years or less....

On the other hand, we have had the technology that could revolutionise the way we manage our healthcare for quite some time, and it gets better all the time, but there are significant barriers to diffusion when dealing with healthcare systems
Telemedicine and eHealth. A model more than ten years old

Source: Niilo Saranummi, PICNIC

Presentation Martin Denz EHTEL, ESQH meeting Athens 2006
As a reflection of the age of this particular model of integrated care, it is hospital-centric and misses a key potential game-changer that has now arrived on the scene – what we’d call mHealth.

I was initially asked to talk about patient empowerment, because of both the EHFF role in the EMPATHiE tender on patient empowerment in chronic diseases management, the subsequent work and also our contribution to the AA6 patient empowerment element of B3.

As an alternative I’d like to ask you to consider the complex interaction between four elements; patient-centred care, ICT, innovation and integrated care systems.
From the middle of the 19th Century, the role of Physician as the high priest of medical craft reached its peak, based on the mastery of traditional knowledge – in particular the ability to recognise the diagnostic significance of complex combinations of signs and symptoms in common conditions now largely disappeared a hundred and fifty years later, such as syphilis, tuberculosis and rheumatic heart disease. In other words the killer diseases that flourished in the pre-antibiotic era.

In the second half of the 20th Century, the Physician became the high priest of techno-savvy. Although pioneers such as Codman had advocated measurement as a means of monitoring effectiveness as early as 1910, it was more than fifty years later that the era of ‘evidence-based medicine’ dawned (really not until 1990). However by then, diagnostic skills had increasingly become based on use of a barrage of clinical tests – medicine had become ‘scientised’.
“Doctor and physician are outdated terms. I’m your biological tech support specialist.”
As a reaction to the prevailing paternalism of the previous hundred years or more, as early as the beginning of the 1960s there were academic physicians such as Szasz et al that had challenged the prevailing social order, just as it was being challenged in other spheres at that time. The key elements here were the principles of choice over issues that affected one’s life, autonomy and proactive involvement. By the 1970s there were signs of a move from a disease-centred model of healthcare to a person-centred model, which almost by definition challenged the concept of the passive patient, although even today there is some disagreement over what ‘patient-centred’ means.

Accepting the value of the active patient and all that it implies, which is now gradually happening, makes real change possible, because, although a proportion of clinicians fear it (like any change) it is the logical consequence of the need to change the roles of clinical staff that has the most potential for bringing about real innovation...
Dr Google......

THE PATIENTS KNOW MORE ABOUT THEIR DISEASES THAN ME. I MUST GET FASTER MODEM, HIGHER SPEED INTERNET ACCESS THAN THEM.
Conceptual framework

Patient Empowerment

OUTCOMES

Patient Satisfaction
Professional Satisfaction
Quality of Life
Clinical Outcomes
Use of Health Services
(Cost)

Strategies of PE aimed towards PATIENTS

Strategies of PE aimed towards PROFESSIONALS

MACRO level
MESO level
MICRO level

EDUCATION

SELF-MANAGEMENT

SHARED DECISION-MAKING

12
For this audience I hardly need to rehearse the basis for the huge amount of work that has gone into the EIP for AHA.

For me, it's not the declared aims, in terms of healthy life years that impresses, but the willingness of people from all over Europe to contribute to the enterprise without significant financial reward and to work together and share information that is so impressive.

However, while I respect all that is being done, I have some doubts.... Just now I referred to ‘real innovation’. You’re all as familiar as I am with the original text of the Action Plan for ‘Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional levels’ presented in Nov. 2012, based on the strategic implementation plans of the previous year.
Appendix B - Links to EIP AHA Strategic Framework

Integrated care: the Care and Cure Pillar within the EIP AHA

The European Innovation Partnership on Active and Healthy Ageing aims to increase by 2 the average number of healthy life years in the EU by 2020, by securing a triple win for Europe:

- improving the health status and quality of life of European citizens, with a particular focus on older people;
- supporting the long-term sustainability and efficiency of health and social care systems;
- and enhancing the competitiveness of EU industry through an improved business environment providing the foundations for growth and expansion of new markets.

This Integrated Care Action Plan will make a contribution to this triple win and addresses the Priority Action Area referred to as B3: **Capacity building and replicability of successful integrated care systems based on innovative tools and services**, under ‘Pillar 2: Care and Cure’ (see the Strategic Implementation and Operational Plans (SIPs) of the EIP on AHA Operational Plan of November 2011).

*It relates to the specific action Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level as further described in that document*

The other Priority Action Areas also mentioned under Pillar 2 (and included in B3):

*Protocols, education and training programmes for health workforce and carers (e.g comprehensive case management, multi-morbidity, polypharmacy, frailty and remote monitoring).* Multi-morbidity and R&D have not yet been addressed in the same way, but this could be a logical next step. In any event, this decision is not for this Action Group to take and is not explicitly addressed in this Action Plan.


So, as I mentioned earlier, patient-centred care is a slightly slippery concept, but for example the recent EXPH report on the ‘future EU Agenda on quality of health care with a special emphasis on patient safety’ made a valiant attempt to define it (see: http://ec.europa.eu/health/patient_safety/key_documents/index_en.htm pp26/8)

Innovation, which is why I highlighted the third bullet point of the ‘triple win’, if seen as part of the ‘Innovation Union’ initiative, is very much a commodity, with an uncertain relationship to what the healthcare needs of populations might be about. But that’s politics – what I’m interested to learn is what in practical terms we take ‘successful integrated care systems based on innovative tools and services’ to mean. Back to Codman – how do we define ‘successful’ integrated care systems and innovative tools (and services)? If we can’t make some rough working definition which allows us to measure things, then it’s all so much verbiage (and we’re working together in a fog, that prevents clear thinking).
The innovation test

"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."
Before we talk about innovation and systems, a word about ICT. It seems to me that there’s a real danger that the ‘shiny toy’ syndrome becomes a barrier to innovation. To give a very public example –
Healthcare and patient empowerment boosted by ICT

Written by Vytenis Andriukaitis on 5 May 2015 in Opinion

eHealth would not only greatly benefit quality and access of healthcare in the EU, it would also help bring down costs, writes Vytenis Andriukaitis.

‘Now consultations can take place over the internet. Patients can monitor their own blood pressure and blood sugar levels and transmit this information to their doctor electronically. These and more innovative healthcare practices are now underway and I welcome them as part of the solution to the challenges facing Europe’s health systems…’

‘I am convinced that the right eHealth tools are empowering for patients and that they can improve access to and quality of care. By freeing up healthcare resources – not least doctors’ time – eHealth tools can help alleviate the burden on our health systems.’

When I worked as a doctor before entering politics, patients’ records were written by hand and consultations and tests were always carried out face to face – there was no other way.
The ‘shiny toy’ problem is that new technology is being used to do the same processes, but faster, maybe cheaper and (maybe) ‘smarter’. What it is rarely used to do is to utilise its potential for changing the whole process to which it is applied. In my book, that would be ‘more valuable’ innovation in the terms used above, what one might call ‘transformational change’.

In the keynote that I gave recently at the PALANTE project closing conference, the point I made was that it’s not enough to provide citizens more access to eHealth tools and assume that as a result there would be ‘empowerment’ in the sense of greater health literacy or whatever. What didn’t seem to happen is that before they started the project, they actually talked to their patients and asked them what they wanted to from the process. Instead they measured their ‘activation level’. What didn’t get asked either were questions like ‘what would the health professionals now do differently?’
In other words, the influence of the prevailing model is so powerful that even when there is an inherent means to change it, it is more likely that the ‘innovation’ is subordinated to maintaining the existing model.

This links to another concern, which is the potential ambiguity regarding ‘scaling up’ as a strategy in the EIP. As illustrated, the original brief talked about ‘capacity building and the replicability of successful ICS’. Currently, the transferability of good or best practice is very much a concern for health policy experts in the EC.

The concept of ‘scaling up’ for the WHO (2009) is defined as ‘deliberate efforts to increase the impact of health service innovations successfully tested in pilot or experimental projects (local evidence of effectiveness and feasibility) so as to benefit more people and to foster policy and programme development on a lasting basis’. For them, innovation could be use of an existing technology, but one not used previously in that location. However, rather than a single medical therapy, clinical practice or programme component, health service innovations are a set of interventions, including the processes necessary to build sustainable implementation capacities.
My next comments might be seen as a bit challenging…..

While transferability of good practices and ‘scaling up’ seem closely related, the Maturity Model appears to be rooted firmly in the IT domain, and relates to the stages of organisation wide implementation of IT systems. Is the latter then, used as an analogy for processes related to the former?

I’m very familiar with the maturity model during its development, as Andrea Pavlickova obviously shared it with the AA6 group and we discussed it extensively last year. I know that Francesca Avolio from Puglia is very keen to apply the model as is Zdenek Gutter from Olomouc and they will be sharing their experience of self-rating for readiness of adoption in a webinar due Nov.10.

My problem is an ‘apples and oranges’ one. The AA7 group are experts in ITC and as such the maturity model is familiar to them in their work in IT implementation. But what they did, to develop the tool was to interview a selection of regional players and from a handful of interviews extract 10 ‘dimensions’ which are to be used for constructing a spider-diagram, as a way of representing readiness for adoption etc.

But what scaling-up is about is replicating successful health systems, sets of interventions, as the WHO paper describes.
You might say that when two Directorates of the Commission (in this case DGSANTE and DGCONNECT) take the innovative step of trying to do a joint project, there could be problems (cf. two countries divided by a common language!)

![Image of two people with speech bubbles: One saying "Nice Pants!" and the other saying "Er! Do you have X-Ray vision or what!".]
This brings me to the fourth element, integrated healthcare systems, which pulls the other three elements, patient-centred care, ICT and innovation together and which is our seminar topic today. When we use ICS as a focus, then the answer to my title question (tools or systems?) becomes clear – it’s like particle or wave – the answer is ‘both’.

If you look at the outputs from the FP7 INTEGRATE project (www.projectintegrate.eu), now in its third year, you will see that the major preoccupation is with systems. ICT is seen as an important enabler (John Ovretveit at Karolinska runs WP10), but the project essentially recognises the problem of transferability and the importance of local context for excellent practices – it’s trying to get round this, not by scaling up, but by micro and macro analyses to tease out common issues which can allow development of an effective model comprised of common characteristics.

As we have seen, the focus in the EIP on the other hand is primarily on the tools. What we have here is an unexpected problem of integration!
In the early 1990’s, 25 years ago, when I first had responsibilities as a medical manager, in this case for some local mental health services in the UK NHS, the issues of ‘a seamless service’ (what integrated care stood for then) were related to the degree to which hospital staff co-operated with primary care staff and health service staff co-operated with social services staff.

There were a few parts of the UK where there were good working relationships but behaviour was generally ‘tribal’ and there were also significant impediments in terms of a) transfer of information (there were only paper records) and b) a mismatch in resource funding, as health funds were centrally allocated and social care funds were influenced by the politics of local government.

Although ‘patient-centeredness’ was not on the agenda, with the adoption in the previous seven years of what were then known as quality assurance approaches, patient representation (such as consumer groups) and/or patient advocacy (at least for mental health services) was just emerging.
infrastructure

Paradigm shift

medical curative model \rightarrow social (interconnected) health perspective

community care
local institutions
specialized institutions

Dr. Nick Guldemond
So – 20 years later. The paradigm shift is not only for the *structures* that govern long term care but the *focus*:

- Person-centred care
- Sustainability (getting it right first time i.e. avoiding waste)
- Communities of practice, not organisation specific
- Care close to home, including diagnostics

What has also changed is the *model of care* and this is best described through the application of the above principles, which includes a radical change in the relationship between health professional and patient/citizen, best described in the context of the ‘House of care’ model, developed by policy experts at London’s Kings Fund.

Note that this model meets the requirements of the WHO scaling up concept as an integrated system, if proven to work effectively – but that for this to happen, the traditional tribalism and perverse financial incentives have to be overcome and that ICT could have a crucial role as an enabler (although only referred to tangentially in Coulter et al.’s account).
House of care model

The House of Care takes a whole system approach to LTC management. It makes the person central to care. It is about aligning levers, drivers, evidence and assets to enhance the quality of life for people with long term conditions no matter what or how many conditions they have.
A. Preparation: Patients may be invited to attend a preliminary appointment to check progress and undergo relevant tests, or they may be sent information by post or email to reflect on prior to a care planning appointment.

B. Goal setting: Patients are encouraged to talk about their experience of living with the condition, their beliefs and concerns, their comprehension of and reactions to the information provided, and their values and priorities; patient and clinician then work together to articulate the patient’s own goals for the future.

C. Action planning: A plan is jointly developed for achieving these goals, including specific behavioural changes if relevant, what to do if new issues arise and identification of appropriate sources of support.

D. Documenting: These actions are documented for use by clinicians and patients, either as a single shared record or two separate records containing appropriate detail for clinician or patient.

E. Co-ordinating: The clinician is responsible for ensuring that all agreed tests, treatments, education or support packages are available to the patient and provided in a timely and well co-ordinated fashion.

F. Supporting: Patient and clinician agree a schedule for regular, systematic follow-up to maintain progress and contact arrangements should any problems occur.

G. Reviewing: A meeting (face-to-face or remote) during which patient and clinician jointly review progress and plan next steps.

From: Coulter, Roberts and Dixon ‘Delivering better services for people with LTCs’ (2013) p.8 The Kings Fund
The house of care model integrates personalised care planning for individuals with responsive commissioning for populations. Individual needs and choices identified during the care planning process (micro-level commissioning) are aggregated to provide a local commissioning plan (see below). In this way, commissioners can match services to their population as well as to each person.
This is very worthwhile and should be pursued… but there may be a Joker in the pack!

We may plan as well as it is possible to plan, but some factors may disrupt the process because they are simply not under our control!
A parting challenge: the ePatient

An **e-patient** is a health consumer who participates fully in his/her medical care. Sometimes referred to as an "internet patient," e-patients see themselves as equal partners with their doctors in the healthcare process.

Based on the current state of knowledge on the impact of e-patients on the healthcare system and the quality of care received:

- A growing number of people say **the internet has played a crucial or important role as they helped another person cope** with a major illness.

- Since the advent of the Internet, many clinicians have **underestimated the benefits and overestimated the risks** of online health resources for patients.

- Medical **online support groups** have become an important healthcare resource. A new phenomenon is the use of social media as an alternative, something difficult to monitor by health providers.
• “…the net friendliness of clinicians and provider organizations—as rated by the e-patients they serve—is becoming an important new aspect of healthcare quality.”

• In order to understand the impact of the e-patient, clinicians will likely need to move beyond “pre-internet medical constructs.” Research must combine expertise from disciplines that are not used to working together.

• It is crucial for medical education to take the e-patient into account, and to prepare students for medical practice that includes the e-patient.
‘The truth is that integrated care strategies can never be successful if they are only mandated from above since the levers for change are limited. Those who have experienced first-hand how to make integrated care work, such as Ken Kizer who headed the successful transformation of Veterans Health in the USA, will tell you that care operates as a complex adaptive system, so change cannot be specified and controlled. Rather, small changes in critical elements of the system need to be leveraged to produce large change.

If strategies must be driven from the bottom-up, this will require the ability to develop and support a cultural and operational willingness for collaboration at a clinical and service level with the investment in the necessary capacity and capability to match. Engaging patients, carers and the wider community to become ‘fully engaged’ as co-producers of their own care is essential, yet undervalued. Attention to the future workforce so that multi-professional working is embraced is (also) needed.’

Nick Goodwin CEO IFIC
The paternalism test (co-production/co-creation?)

WE WANT COMMUNITIES TO 'OWN THE BIG SOCIETY... WE WANT YOU TO FEEL IT BELONGS TO YOU! WE WANT YOU TO HAVE 'OWNERSHIP' OF IT, TO BE RESPONSIBLE FOR SETTING IT UP... AND THIS IS HOW WE'D LIKE YOU TO DO IT!