

*Strategy & Policy*

# Health Telematics and Future Society: the patient's perception of care

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

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## Health in the '90s: from WebNews, dateline 04-25-2095

Recent archaeological diggings under Leicester Square Green Park  have unearthed a treasure trove of early 21st century computer diskettes.  After extensive restoration, we now have more insight into the experiences of people living in this era of rapid change.

Professor Jean Bart, of the Chertsey campus of ULondon Plc  [runad, cue cv], a leading


researcher on the early years of this century, says  

"It is quite extraordinary to find such an intact diary of the first of the post-modern patients. As you know, the post-modern patient emerged in the late 20th century, and follows the development of medicine as practised then until we entered the post-doctor era in 2025.

Certainly, in the early years, clinical change was characterised by extensive new methods of treatment led by the biotechnology industries, which brought to market significant new treatments for genetic diseases starting with cystic fibrosis in 2010, until genetic treatments were generally available by 2050.

But in the early years, patients experienced a tension between their own desires to be in control of their own health care needs and the control exercised by dominant power blocks within the society. The rapid introduction of health telematic technology, or as we now call it, "welltel", shifted control to citizen initiated care systems. Indeed, the first health television channel created the insights to develop what we now consider normal in health provision.

The "doc-wars" of the early 21<sup>st</sup> century ended the professional monopoly control by doctors and led to the shift away from acute and invasive medicine to community-based health provided by a wider mix of health specialists and alternative therapists. This reenergised patients to seek control of their own health needs. And it is instructive to recall the terrible horrors of the early biotechnology "mistakes" that by 2020 had created the "technology with a social face" movement.

It is important to appreciate the tremendous power exerted by what was known as a "hospital" ; operating like the primitive factories of the industrial revolution which created them, and health specialists acting like members of traditional crafts or guilds, controlling who could do or know what. The effect on people was to perpetuate the socially defined sick role, and disempower people.



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As advanced multimedia applications moved into health, these large institutions gradually shrank, became fewer in number until they transformed into the small community centres



we take for granted today. The legions of managers who ran these institutions shrank accordingly as more democratic systems of management emerged, supported by the very same clinical technology, to manage the patient's health record, document the integrated care pathways, and pay the bills.

This material, recorded in a personal diary, provide startling insights to early telemedicine or telecare as it was known then." [soundoff]



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**extracted Diary notes of Vivian Rowley , various dates to 2010**

... woke up this morning not full well. i must have picked up some sort of virus visiting Caracas last week. had my knowbot [a primitive machine intelligence] scan recent similar reported illnesses, it found a trend and televideoed my local healthier to arrange an antidote to be delivered. i went out later to visit friends before completing my study of hazardous emissions from electric cars for the *Independent Times*...

...welcomed the new family to the neighbourhood and helped them arrange the transfer of their internet [an early form of electronic communication] connections to the local health services affinity node. we also reviewed the online healthnet resources. i suggested that Eds Polyclinic, next to the Safebury store, provided good response times and had 24-hour/7-day services with online and teleconsulting to speciality services. The clinic offers extensive at-home visiting services and is progressive compared to the more traditional local GP practice. i mentioned that i was particularly excited about the new home-visiting surgery service as well as the drive-in care clinic which the nurse practitioner head of the clinic is introducing. the clinic keeps asking us to email our local MPs to complain that OfHealth takes too long to issue the local service licences; it seems Oftel needs to ensure that the telelinks are fully secure before they licence the lines for clinical applications. i suppose that makes sense, but the PharmaCare services are just as good even though the local health commissioners are still on about whether the private services are properly regulated; they're so out of touch...

...maybe i'll send Sandy, this year's manager of the clinic, a note saying i'll vote for her next year as manager; she is clearly community spirited...

...visited my parents at home yesterday just as mum was having a hip adjustment done. it acted up while she was on hols in rome, but she couldnt get the parts and the teleconsult from rome was disrupted by server problems. it didnt help that she had left her health record in her other handbag; mums so forgetful but the newer health cards are easily lost; at least she remembered her PIN so they could access the backup at the clinic. i think shes going to have words with the engineer who installed it. at least she doesnt have the older less reliable "non-organic" hips. dad was out having a low-stress jog according the telemetry monitor in the kitchen which was also automatically updating his health record.

...Andrew came home from school today and complained about a stomach cramp. i have arranged a visit to the clinic for tomorrow at 0730 before his swim. the clinics intelligent booking system warned me there may be a short wait...but ive been told the newer telemetry links will mean he soon wont need to even visit the clinic.... [end]



## **So what does it all mean?**

What is often not fully appreciated is the impact technology can have on the patient's perception of care. Increasingly, as technology intervenes between the patient and the care provider, we will be faced with important social questions about how these technological possibilities should be embraced, and what their impact is likely to be, on the patient, and how we organise care, itself.

One of the emerging trends is that patients will receive care closer to their homes; this is partly being driven by clinical innovation which seems to require less and less the traditional notion of a hospital and by the merging of voice, data, and image (telephone, computer and television) into a multimedia stew which permits various new ways of connecting an individual person with an individual health practitioner. The emergence of "location-independent care" is a serious reality if we can resolve how to ensure that clinically important information (such as the individual's health record) can be equally available.

Certainly, rapid progress is being made in health telematics involving the use of electronic digital imaging and data transfer to facilitate remote diagnostics, and remote messaging including "internet prescribing".

I would suggest that there are interesting possibilities which bring together thinking about the decentralisation of care, with advances in technology. We should want the individual patient to be much more within the clinical decision-making process. And, technological innovations will permit individuals to have more information about possible care options, as well as generally be more informed about health matters.

I would suggest that the impact on management in healthcare as we now know it will be to marginalise traditional control notions of management, and move to more overtly democratic forms of decision-making and resource management. In some ways this could help the government achieve sustained reductions in the cost of management by shifting the management tasks to those who directly engage in health care transactions, namely the patient and the doctor, pharmacist or nurse, etc. This shifting of the management "value chain" towards the patient is no different from what the private sector is doing when they seek to enhance the value of their product to potential purchasers with value-added services. And indeed, in many cases we, as purchasers, are increasingly making management decisions when we buy food, book a holiday or eat lunch.

The clinical workplace, viewed today as the hospital or clinic, has really changed little over the century and may retain lingering features of the industrial revolution. Telemedicine and information-based technology will not just alter the structure of care, but will alter the structure of the industry itself, in the same way that information technology has not just made it easier to check our bank balance, but has altered the structure of the banking industry itself.

But if you think of people being given local anaesthetics for day surgery, can we continue to use the current practically-designed operating theatres -- won't we want them to look more



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pleasant and inviting. Perhaps dentists can tell us a bit about concealing the technology...! Indeed, hospitals are complex places to manage, not near the customer, and contain a dizzying array of systems, processes and activities which are rarely optimised on their own, let alone with respect to each other.

So if the clinical workplace changes, then how it is managed and resourced will change, too. It is here that informed consumers create their expectations, and health specialists respond. Managers are often the most removed from the care environment and often contend that they have specialist skills to manage the complex aspects of care.

Health telematics will not just change the use of clinical data. It will lead to the integration of clinical and management data, presenting it in forms that can be widely understood, importantly by patients, and this will alter the power balance.

**NOTE:**

Paper presented at the Royal College of Medicine Telemedicine Roundtable, 1995, and the Telemedicine in Wales Conference, 1996.

