December 1998

Policy and Telehealth: Social Implications of Telehealth and Telecare Technologies

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Abstract

A significant change in the UK health policies can be traced over the last decade, as a shift from medicine to health, with an emphasis on the well-informed population taking an active part in maintaining health and implying a changing role for the National Health Services (NHS). Telehealth is seen having potential as a facilitator of these changes, enabling health services to be brought to communities and into homes. This paper questions such a benign vision of telehealth and points out social problems that may arise on the introduction of telehealth services.

Introduction

An ageing population, the rise in proportion of people with long-standing illnesses and the availability of ever more expensive treatments contribute to rising costs of health care provision. National governments seek to control these costs without reducing the quality of service, or possibly enhancing it. Information technologies are often seen to have a conventional role in improving administration and service delivery, but recently new ideas for telemedicine, telecare and telehealth have emerged. These terms refer to services that can be provided in electronic form over various telecommunications networks. Telemedicine facilitates remote patient care in an institutional setting, for example, linking hospitals with remote surgeries and enabling remote diagnosis. Telecare refers to services that provide care for people away from institutions, typically in their own homes, for example monitoring elderly patients as they lead their normal lives. Telehealth is perhaps more encompassing, and addresses opportunities for health promotion among a wide range of people including the young and healthy. Such services may effect the lives of many people but they are not well researched. The majority of research studies concentrate on the technical side of telemedicine and present simplistic models of the benefit of such applications.

This paper sets out to deliver a critical account of telehealth and focuses on the British government's emerging health policies, potentially a major factor shaping telehealth.

Government Policies

Health policy in Britain has been a significant part of the political agenda since 1945 and the establishment of the National Health Services (NHS) three years later. However, in the last decade it has been given a particularly high priority. Starting with the fundamental administrative reforms set out in the white paper 'Working for Patients' (DOH 1989), and the establishment of an 'internal market', a succession of white papers and green papers have articulated a changing vision of health and medicine. A significant policy shift from medicine to health was signalled in the white paper 'The Health of the nation' (DOH 1992). This stressed the importance of people taking responsibility for their health and suggested that a healthy population was the goal of policy. It promised individual opportunities and wider choices, facilitated by health education in schools and for the general population, emphasising the need for reliable and diverse sources of information about health.

The white paper 'The new NHS' (DOH 1997) produced by the new Labour government addressed organisational issues for the health service, mainly the replacement of the internal market with integrated care. It set out the challenges for the NHS as: providing high quality treatment, working with others to improve the health of the nation and reduce health inequalities, as well as tailoring the NHS to meet the needs of individuals. In contrast to the 1989 white paper it defined the role of information technologies as supporting front line staff in delivering benefits to patients and bringing new telehealth services to communities and into individual homes. These services would include: on-line booking of appointments, delivering patients test results, providing up-to-date specialist advice, and general information about health and illness over the Internet and emerging public access media (e.g. digital TV). A first step in this direction has been the establishment of NHS Direct, a 24 hour telephone advice line staffed by nurses.

These issues were taken up and further developed in the green paper 'Our healthier nation' (DOH 1998). This paper introduced a new concept of 'a third way between the old extremes of individual victim blaming on the one hand and nanny state social engineering on the other' (page 4). This indicated a partnership of the Government, local communities and individuals, working together to improve the health of the nation. The government's aim was defined as 'To improve the health of the population as a whole' and 'To improve the health of the worst off in society and to narrow the health gap' (page 5). Fighting

health inequalities was linked to tackling all kinds of inequalities. Social exclusion was identified as both one of the causes and effects of ill health or disability.

Discussion

An emerging vision of telehealth can be discerned. This is of a population who has the informational resources to manage their own health, and to participate more actively in the health care process. The vision is set against a broader requirement for tackling inequality, promoting social cohesion and controlling costs. This is achieved through new technologies and new informational resources. There are however problems with this vision of telehealth. We explore here three, access, the community versus social exclusion, and the medicalization of health provision.

Access

Access to any information service for the population as a whole is a major issue. Statistics on IT ownership indicate that the provision of advice and information over the Internet will not ensure equal access to health information for all social groups or ethnic minorities. Currently in Britain about 25% to 33% of households own computers. But out of those only 20% are connected to the Internet. These figures are much lower for elderly households. The Internet user is likely to be young, male and from higher social classes. Even if we take into account the rapid growth in connections to the Internet the majority of people will not have home access for some time.

A network of healthy living centres across the UK, proposed in the green paper (DOH 1998) may partly overcome this problem. Their aim would be to reach out into communities and raise local awareness on varied health issues, i.e. diet, smoking and physical activities, etc. Whenever possible this could be aided by linking such centres to a new web-site, *Wired for Health* - a window to other credible web-sites providing health information.

Community

Telehealth services, particularly personal telecare systems, may contribute to social isolation. This may be exaggerated by displacement of other conventional relationships by computer mediated communication, for example, substitution of day centres, where older or disabled people meet and engage in varied activities, by discussion groups over the Internet. Yet, the green paper (DOH 1998) acknowledged that studies have found that the socially isolated were over six times more likely to die from a stroke and more than three times as likely to commit suicide when compared to people with many social ties. More generally, the continuing importance of social relationships and social ties, particularly for psycho-social health, has been well documented (Cox, et al. 1993).

Medicalization of the Health Provision

The issue of social isolation is linked to the de-personalisation of health provision and to the substitution of care with treatment. Thus, Fisk's (1995) assessment of personal response system/community alarm services showed that many benefits, particularly a feeling of increased security and confidence were experienced by users. But he also pointed out that, as more people joined the services, staff responsibilities shifted from caring to responding to emergencies. This is seen as 'clear process of medicalization taking place within personal response services'.

This trend can be identified in many accounts of projects published in specialist telemedicine and telehealth journals. For example Mahmud and Lenz (1995) consider time saving (of physicians) resulting from the introduction of a personal telemedicine system as the major benefit. The authors stated that no time was spent on travelling to patients' homes and 'Video visits were of much shorter duration than home-care visits … less time was spent on conventional greetings and farewells'.

Conclusions

As suggested above, the introduction of telehealth may have less benign effects than is envisaged by policy makers. Contrary to the rhetoric, it may lead to further de-personalisation of health provision and accentuate, not eliminate inequalities. This is, amongst other reasons, due to difficulties with the provision of equal access to services, the re-definition of patient-doctor relationship due to computer-mediated communication, and the elimination of care element from the treatment.

This brief analysis suggests a set of issues that require research that gets beyond a naive technological determinism or a narrow focus on cost cutting. Our research into these issues is informed by a number of theories broadly united under the banner of Social Shaping of Technology (SST) (MacKenzie and Wajcman 1985; Bijker, et al. 1987; Dutton and Peltu 1996). The common assertion is that technologies do not follow predefined trajectories or have predefined effects. At any given time a number of (often unconscious) choices exist. How these choices are made is influenced by many factors, including government policies. Those policies shape telehealth by supporting particular services and allocating funds, and indirectly by promoting certain lifestyles or reorganising health care provision. This paper argues that consequences of such policies be carefully assessed within a SST framework.

However, technologies are changed and new innovations take place, during implementation and usage not only during design stages. Thus further research should have a much wider scope and include (but not be restricted to) the following:

1) Examining the process by which conflicting ideas and interests of different groups can transform technologies, so they no longer fulfil the roles envisaged for them during the idea-formulation and development phases. For example telehealth technologies that were employed to promote social cohesion and equality and to improve care may in fact lead to social isolation, increased inequalities (e.g. of access) and medicalization of health care provision.

2) Exploring the reasons behind people's decision to use new technologies or to discard them. Studying how people 'appropriate' new technologies at home, i.e. how telehealth may be re-invented to fit in with daily lives.

3) Investigating how people understand, translate and act upon information, including health messages and promotions.

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