Geographies of eHealth
Studies of Healthcare at a Distance

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Abstract

This thesis examines the proliferation of healthcare services using information and communication technology to overcome spatial and temporal obstacles. These services are given such names as telemedicine and telecare, which are sometimes grouped together as telehealthcare under the umbrella term eHealth.

My main argument is that a prevalent and overoptimistic rhetoric of how the possibilities of digitalization are expected to produce a homogenous and ubiquitous healthcare space conceals many of the spatiotemporal complexities involved in introducing telehealthcare and in the overall organizing of healthcare. To counteract such simplifications, I contend that we need a relational understanding of the technical and the geographical as always nested in the social and vice versa. With such an approach, it is arguably possible to begin to tease apart the many spatiotemporal entanglements of these innovations and to trace their political ramifications. This position is developed by integrating perspectives from science and technology studies with insights from human geography. The four constituent papers of this thesis pursue this argument in qualitatively grounded case studies of telehealthcare and its geographies.

Paper I looks at various initiatives for fetal tele-ultrasonography, demonstrating that this practice cannot be reduced to a mere transparent relay for the speedy transmission of digital information across space and time. The paper investigates how its introduction could affect medical knowledge production, power hierarchies, and subject positions, for example, the status attributed to the fetal figure.

Paper II traces Swedish transformations of telehealthcare. The use of telemedicine to reach those outside medicine’s range has arguably been accompanied by efforts to achieve intra-organizational streamlining via telemedicine. This process has continued with the emergence of telecare for personal use directed toward the overlapping groups of the elderly people and patients with chronic conditions. I contend that this shift can be understood through a geographical lens as attempts to save space and time by keeping as many patients as possible out of costly hospitalization and preventing them from engaging scarce specialist resources.

Paper III compares four telemedicine projects in Sweden. In detailing how the purpose of practicing telemedicine differed between these projects in relation to, for example, the specifics of distance, care availability, and treated medical conditions, the paper demonstrates the existence of many versions of telemedicine. Whereas this fluidity could further the spread of telemedicine, it could also cause problems. To various actors wanting to use telemedicine in a homogenous and fixed way for national streamlining purposes, this diversity has generated confusion when they wished to align telemedicine in a preferred direction. The paper concludes that technology travels best when it can contain both fluid and fixed relationships.

Paper IV argues that, whatever is claimed about creating a space- and time-independent healthcare by means of telehealthcare, the use of telecare to connect the standardized spaces of healthcare with the fluid everyday lives of elderly people and patients with chronic conditions actually works by unfolding new spaces of visibilities and establishing new temporalities as well. By investigating these spatiotemporalities, I demonstrate how these applications draw together discourses on individual freedom with medically derived algorithms and concerns about how to make best use of scarce healthcare resources.


Keywords: eHealth, telehealthcare, Actor-network theory, space, information and communication technology, governmentality