

ONLY CONNECT **Nicholas A Christakis**

Valuing the well connected

Should the healthcare system favour people whose treatment is more likely to also benefit those around them?

When illness in one person is treated or prevented, others to whom that person is connected also benefit. Replacing an elderly man's hip or providing better terminal care for a woman improves the health of their spouses. Getting people to lose weight or quit smoking encourages their friends to do likewise. Treating depression in one man makes those around him happier. Vaccinating part of a population benefits everyone.

All these effects are reflections of our embeddedness in vast social networks involving our fellow human beings. The benefits (and costs) of healthcare interventions can ripple through the network, creating additional benefits (and costs) for others both near and far.

But the better connected that people are—the more family and friends they have, and the more central they are in the network—the larger these effects. If we were to replace the hip of a hermit or get him to quit smoking no one else would have their health improved as a result. It usually makes more sense to vaccinate the highly connected hubs in a social network rather than individuals at the periphery.

This leads to a problem. Taking network effects seriously means that we should value socially connected people more. From a policy perspective—if not from a moral perspective—the connected should get more healthcare attention. This issue has been tackled before in a seemingly unrelated way. In the early days of kidney dialysis and transplantation, preferential access was given to “family men” who had dependants. A married man was much more likely than an unmarried one to get a kidney. An explicit justification was that not only the patient but also his family would benefit, thus increasing the return on the use of an extremely scarce resource.

People became uncomfortable with this rationale, and it underwent what many regard as a merely cosmetic change: interpersonal considerations continued to enter the decision making process by reference to the “better nursing care” that married men would receive (from their wives) and their “greater attention to their medical regimens” (because they felt responsible for others), both of which were thought to lessen the risk of organ rejection. Eventually this rationale was also abandoned. Nowadays there is generally no explicit priority for people who have families (let alone friends) in the allocation of transplant organs.

But perhaps medical care should indeed be given preferentially to those who, in receiving such care, will yield a better return on the investment? Maybe people with families, or people who are merely very popular, should get more care?

It is still generally considered more appropriate to transplant a kidney into a younger person than an older one. Although this decision is partly justified by the greater likelihood of success in the younger person (for diverse physiological reasons), it also makes more sense from a utilitarian perspective. If a 50 year old will live for 30 years with a transplanted organ and a 75 year old will live for five, it makes little sense to give it to the older person. But consider this: what if a married 50 year old would derive 25 years of life extension and two years for his wife, but an unmarried 50 year old would derive only the 25 years. Should we not here again choose the scenario with more years of benefit? Should the fact that the health benefits are distributed across people rather than within them matter?

Interpersonal health effects thus raise a troubling moral question: should we value the well connected more? Health care delivered to well



PAUL SCHNITTACHER

“If we were to replace the hip of a hermit or get him to quit smoking no one else would have their health improved as a result”

connected people is clearly more cost effective; it offers more quality adjusted life years per dollar spent. But should the connected therefore get easier and more access to care than the less connected? Is a connected life more valuable than an unconnected one? Such questions are especially apt in places with a single payer system.

In some ways people who are well connected already get more and better care. The married seek out and are given better quality medical care than the widowed. People with connections are better able to find good doctors. People with friends have better health than the friendless. So what would be the problem in making this an explicit agenda for the healthcare system?

After all, this would involve merely replacing one kind of privilege with another, perhaps for the better. Our healthcare system already privileges those with particular socioeconomic positions, such as wealthy people. Why not replace an inexplicit privileging of socioeconomic position with an explicit privileging of network position? This might be more just, leading to a more equitable distribution of resources. Although giving an extra healthcare dollar to a rich person rather than a poor person does not increase the overall health or distributive justice in a society, giving an extra healthcare dollar to a connected person does.

Still, this conclusion makes me uneasy. If anything, the healthcare system should function as a safety net, providing the kind of benefits to less well connected people that they cannot otherwise obtain from their own family and friends.

Nicholas A Christakis is professor of medical sociology, Harvard Medical School, and attending physician, Mt Auburn Hospital, Cambridge, Massachusetts

christak@hcp.med.harvard.edu

Cite this as: *BMJ* 2008;337:a1675