

POSSIBLE ANTICOMPETITIVE EFFORTS TO RESTRICT COMPETITION ON THE INTERNET
A REVIEW OF THE INTERNET-ENABLED MEDICAL MARKETPLACE
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Statement Overview

The Internet has enabled the medical marketplace to provide new products and services to consumers. Health e-businesses ranging from subscription web portals to online pharmacies have developed and disintegrated with global e-commerce bubble and bust. Despite the overall downturn in e-businesses, health-related e-businesses have continued to thrive, particularly online pharmacies. The Internet has provided consumers with a virtual health sector experience from ordering prescription drugs, to seeking physician referrals, to buying health insurance. However, existing state and federal regulations governing the old health economy can limit the development of the new health economy. New or revised legislation and regulation may be warranted to protect consumer privacy, minimize fraud and abuse, decrease transaction costs, as well as open new markets to competition. This review describes a sample the current health e-businesses and the current impact of state and federal regulation on this new marketplace.

Working Definitions

It is useful to provide common intended definitions of the topics to be covered. Specifically, three terms are used to describe the three most common health e-business applications:

- Online Pharmacy: An online pharmacy is defined as a firm that uses the Internet to 1) take an existing prescription order from a physician, fill it, and deliver it through the mail; 2) have a consumer complete a medical survey to inform online pharmacists of the choice of prescription drug (if any) to be supplied; and 3) provide a prescription drug without any review of the patient's condition.
- Telemedicine: The provision or support of medical care provided through the means of the telecommunication infrastructure including the Internet, phone or dedicated data transmission services. Often the use of a digital technology, such as scanned image or voice, is conveyed over long distances using the existing telecommunications infrastructure.
- Consumer-driven Health Plans: An Internet-enabled form of health insurance or medical savings account funded by an individual or an employer.

Competition Concerns

Two major concerns arise in the health e-business marketplace. The first is barrier to entry. Existing state and federal regulations have limited the development of e-business opportunities. An often cited example is online pharmacy firms that are being forced to be considered out-of-state enterprises for regulatory purposes and to provide an array of

additional information that appears to be an unnecessary regulatory burden. The state's central regulatory tool is licensure of the online pharmacy. It is not clear the advantage state presence serves, since many online retailers such as Amazon.com or Target.com use existing supply chains that do not require state-specific operations.

The second competition concern is the danger that information asymmetry and fraud forestalls an informed consumer making a welfare improving (or at least welfare neutral) choice. Since Arrow's (1963) article on the economics of medical care, economists have argued that the average consumer has an information asymmetry problem due to the lack of medical knowledge of the best pathways to treat a medical condition. Presumably, the information asymmetry problem can be confounded by fraud where someone claims to be a prescribing physician and recommends a prescription online that is completely inappropriate to treat the consumer's ailment. To mitigate information asymmetry issues, government regulations require disclosure of the effects of medical services and licensure to grant only trained individuals the right to practice medicine. The problem the Internet introduces is an additional opportunity for fraud that is harder to identify and prosecute because the relative effort and cost to produce a deceiving electronic storefront is far less than for a physical plant, like a physician's office.

Current Health e-business Practices Considered

Three frequently cited practices that are affected by regulations are considered.

- Out-of-state versus in-state online pharmacy: As stated earlier, many state governments have considered how to treat online pharmacies. Approaches have varied from outright legislation to medical practitioner policy changes. The desire to regulate online pharmacies seems to be guided more by territorial competitive practices of the local pharmacy and some safety concerns. Frequently, the insurer reimbursed online pharmacy activities require active participation of an accessible medical provider, a model to which the two later types of online pharmacies described earlier would not conform. Only a small amount of legislation appears to be informed by empirical studies that make a clear case for government intervention due to market failure.
- Insurance reimbursement of telemedicine services: There is a growing literature of empirical studies demonstrating the cost effectiveness of telemedicine technology. The issue for private hospitals and insurers when considering telemedicine is whether it will be a cost-savings for the organization. The most likely situation for cost-savings to occur is when the insurer is responsible for all medical care and related expenses such as travel costs that would be mitigated by telemedicine. For example, the Veterans Administration reimburses veterans for every mile they drive to seek preventive care. Telemedicine can offer a substantial savings. Unfortunately, the case for cost-saving is not clear for most private insurers whose predominant population is located in metropolitan areas having a high supply of medical providers. Also, insurers worry that telemedicine may so lower the cost of medical care to a patient

thus creating a moral hazard problem by encouraging patients to seek medically unnecessary services.

- State versus federal licensure of physicians, pharmacists and insurers: There are many functions that should be regulated by states rather than the federal government because of operation efficiency to stay close to the locus of activity for monitoring and enforcement efforts. Healthcare has traditionally been a local affair because of the centuries old relationship between a community and its hospital/almshouse/clinic and its medical practitioners. Yet, medical education is somewhat of a national affair when a medical doctor can - without many barriers - move about freely to practice around the country. Similarly, pharmacists practicing in a Walgreen's in San Diego should feel right at home in a Walgreen's in Chicago. Finally, national health insurers such as United Healthgroup, Aetna, Humana, Healthnet, Anthem and Cigna have clearly demonstrated that a federal infrastructure can be achieved and yield appropriate economies of scale. Why then are core medical institutions state licensed rather than federally licensed? The Internet takes this issue even a step further by demanding the consideration of a rapid reformulation of states licensure policies with a focus on a high level of reciprocity to allow states to concentrate on monitoring and enforcement of fair practices, rather than licensure.

Discussion

When considering the policy impact of state regulation affecting health e-business, the focus quickly turns to the consumer. In response to the query of whether consumers face higher costs due to state regulations, it is difficult to have a clear opinion based on the information at hand. First, we must disentangle insurance reimbursed services. For insured services, online pharmacies are not typically an approved benefit unless they qualify for payment by a pharmaceutical benefits manager (PBM) delegated by the insurer to administer this benefit. Typically, telemedicine is also not a reimbursed service unless it is paid for indirectly as a medical practice expense. Alternatively, an unmanaged online cash payment to pharmacies is more likely to encourage consumers to shop aggressively. But, it is not clear whether there is a telemedicine cash market for pharmaceuticals. For online pharmacies that require a prescription, the consumer could be better off because of greater competition in the online marketplace. In contrast, it may be that online pharmacies can charge a profit markup on every transaction, which could make the consumer worse off.

Who is getting the benefits of state regulation in this market? Most likely the benefits are passed on to the consumers who may otherwise also be subjected to more fraud than they have already experienced. One way to test this is to identify states with and without regulations and survey individuals about the impact of fraudulent practices. For now, there is not a clear empirical answer to inform this query. The other beneficiaries of these policies may be the current local pharmacies and medical providers who have been protected from additional competition they may encounter from Internet-enabled practitioners.

In the case of telemedicine, states regulate on two levels. First, they determine whether telemedicine will be reimbursed by Medicaid. This sends a powerful signal about reimbursement policies that spill over into the private sector. Secondly, states determine whether a physician practicing out-of-state can be considered an approved provider.

The state governing bodies that control Medicaid and state licensure would benefit from access to a growing body of literature on telemedicine, cost effectiveness results from demonstration. In fact, several states have actually initiated and funded a demonstration to gain additional knowledge. At issue is whether the technology is cost saving or cost effective. However, telemedicine's impact cannot be generalized as a whole technology since the variation in applications is very granular to the level of disease and medical specialization. Thus, state consideration of Medicaid reimbursement on an application-specific basis is a reasonable way to proceed forward. The state licensure restriction on providers practicing medicine across state lines deserves more consideration in order to identify whether the benefits of such a policy overwhelm the anti-competitive impact it may generate.

As suggested earlier, government insurer reimbursement policy can play a major role in acceptance of a new technology. In the past, Medicare has had a very restrictive telemedicine reimbursement policy. But, in December 2000, the policy became somewhat more liberal, though restrictions are still present as more results from demonstration and evaluation are considered. If a medical technology, such as a telemedicine application is approved for reimbursement by Medicare, it provides an instantaneous revenue source for the application developers, as well as a de facto "seal of approval" on the legitimate and mainstream use of the technology. This approval is often used by private insurers for their own determination of payment policy. Whatever the decisions of Medicare, they will have a greater impact on the demand for telemedicine services than the current state Medicaid reimbursement policies and medical licensure requirements.

Conclusions

In summary, the presence of out-of-state /non-resident pharmacy laws to regulate online pharmacies does not appear to make a great deal of sense and could discourage competition. In addition, the detection and monitoring of fraud should be decoupled as a separate ongoing activity that does not need to legitimize potentially anti-competitive behaviors of local market actors. As suggested by a 2000 GAO report on online pharmacies, disclosure and acknowledgement of personal liability by consumers, plus providing an approved list of qualified Internet sites, may help mitigate a ruinous level of fraud. Medicare reimbursement of telemedicine should be carefully considered as it may run counter to state policies. As a positive externality of a more liberal Medicare reimbursement policy, telemedicine could provide the critical mass for a broader health IT infrastructure. The positive externality would be the higher degree of integrated care that enable better tracking of health outcomes as well as provide a potential foundation for a national bioterrorism defense network. Telemedicine may lead to greater demand

for care, but it could also enhance quality of care which could offset the initial short run costs with long-term cost savings in terms of quality adjusted life years. More evaluation is needed to know the extent of this externality. Finally, consumer-driven health plan trends will probably drive up demand for more online health services. These plans should be allowed to serve as labs for what will be covered by employers, in order to gauge how much online medical service can be provided in an integrated Internet-enabled health insurer and medical care provider.