

# The economics of choice: lessons from the U.S. health-care market

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## Abstract

The English health-care system is moving towards increasing consumers' choice. Following economic thinking, it is assumed that such a policy will improve quality, enhance patient satisfaction and reduce health disparities. Indeed, the English health-care system has already built the necessary infrastructure to increase patients' choice. Before expanding the range of choices further, however, it is important that policy makers be aware of the limitations and hurdles that such a policy contains. Here, we highlight these limitations by drawing on the influential work of Kenneth Arrow, who has argued that we cannot treat the health-care market as if it was just another market, and the ideas of Herbert Simon, who questioned whether people had sufficient cognitive abilities to make effective choices in an information-rich environment. In the light of these two strands of thought, we review evidence suggesting that many older adults have low (health) literacy levels, raising concerns over their ability to obtain, process and understand medical-related information, with its increasing complexity, associated risks and emotional involvement. We also discuss recent findings from the United States highlighting the difficulties older users of health-care face with a wide range of prescription drug insurance plans from which to choose. Thus, learning from the experience of health-care systems where choice is abundant could help any health system interested in extending patients' choice to better target the domains where more choice could be beneficial and possibly avoid those where it could be detrimental.

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## Introduction

The English health-care system is moving towards increasing consumers' choice. Indeed, the choice infrastructure is already in place and is now a legal right. This is not necessarily the case, however, over the entire United Kingdom health-care system. Following devolution, Scotland, Wales and Northern Ireland have embarked on

their own health policy revisions, none of which include expanding consumer choice. In what follows, therefore, we focus on policies that are specific to the English health-care system.

Driven by economic thinking, the English health authorities believe that offering more choices will improve quality, enhance patient satisfaction and reduce health disparities. They also presume that patients will have access to the

right information, be able to process that information and make sound decisions. Currently, the range of choices available includes selecting a general practitioner (GP) and a hospital at which to be treated. Giving patients the ability to choose their GP has garnered much support.<sup>1,2</sup> Allowing patients to choose which hospital to be treated at is a far more complicated and controversial idea.<sup>3</sup> In addition, the Department of Health (DoH) intends to extend the spectrum of choices patients have, but it has yet to specify the areas where more choice will be offered.<sup>4</sup>

Before the DoH expands the range of choices further, it should be cognizant of the limitations and hurdles that such a policy contains. For example, experience from the United States highlights the difficulties older users of health care have when faced with a wide range of prescription drug insurance plans from which to choose. Learning from the experience of other health-care systems could help the DoH target the domains where more choice could be beneficial and possibly avoid those where it could be detrimental. Indeed, the US health-care system could serve as an example—be it positive or negative—for the DoH choice policy, as it has long cherished the idea of choice, and much evidence is available to evaluate its value for consumers.

### **The uniqueness of the health-care markets**

In one of the most influential articles ever written in the area of health economics, Kenneth Arrow<sup>5</sup> argued that we cannot treat the health-care market as if it was just another market. His argument rested on a number of assumptions. First, health care is characterized by high levels of uncertainty. Patients, for example, are often unsure about the nature of their diagnosis, the probability of a successful treatment and the merit of each treatment option. Under such conditions, knowledge itself becomes the valued commodity. That is, the reason patients seek help is precisely because of the physician's superior medical knowledge. Second, medical information is elusive by nature, such that patients often encounter difficulties in accessing

and understanding it. Thus, there is an asymmetrical relationship between physicians and patients, where physicians' knowledge far exceeds that of their patients (though the Internet might have reduced this gap). Third, as some people are better informed, either by having more resources to garner information or being better able to process the information (or both), they are better positioned to take advantage of the information available (possibly leading to inequality among patients). At almost the same time, Herbert Simon introduced the idea of bounded rationality to describe people's limited information-processing capacities, and the argument that the environmental structures that people encounter—that is, whether the environment is information rich or poor, and whether it offers many or few choices—can affect the decision-making process.<sup>6,7</sup> Both Arrow's and Simon's work highlights the possible hurdles that consumers of health care might encounter in either gaining access to the information or, more importantly, understanding the information.

One might wonder how Arrow's and Simon's ideas relate to the DoH new choice paradigm. The connection becomes clear when one reads the DoH statement that there is a need to 'ensure people have the right information, at the right time, with the support they need to use it.'<sup>8</sup> Arrow's and Simon's work challenges precisely the assumptions that patients are able to obtain the right medical information and to process, understand and utilize it effectively. Increasing the range of choices—and thus creating a more complex health decision environment—could have a counter effect to the one predicted by the DoH. It could increase (rather than decrease) health inequality, because some consumers would have better access to information and greater ability to interpret the information. It could reduce efficiency because consumers may make choices that are not in their best interest, if they cannot or do not interpret available information correctly. It could place a greater burden on physicians, who would have to devote (already limited) time to providing advice about where to receive treatment.

## Health literacy and health behaviour

Most would agree that to participate effectively in any health-care environment, consumers need to be able to read, process and evaluate medical information.<sup>9</sup> Indeed, health authorities in the United Kingdom<sup>10</sup> and the United States<sup>11</sup> have long recognized that health literacy is essential to successfully navigate the health-care system, adequately evaluate medical information and make sound medical decisions. Whether patients are able to accomplish these tasks is far from clear (leaving aside those with mental or cognitive impediments because of illnesses such as dementia).

In one of the larger literacy studies in the United States,<sup>12</sup> researchers found that 44% of older adults (those 65 and older) scored in the lowest reading level (level 1). A follow-up study,<sup>13</sup> which included a health literacy section, revealed that 14% of US adults have below-basic health literacy ability and 22% have basic abilities only. Among older adults, the numbers are even more alarming: 29% were below basic level and another 30% were at basic level. Indeed, over 80% of patients aged 60 years or older exhibited inadequate health literacy—such as the ability to read drug prescription bottles or even appointment slips—and could be placed at a reading level equal to that of a fifth grader. Although data is scarcer about the UK population, about half of the UK adult population falls below literacy level 2 (the level needed to discuss a condition with one's physician or specialists).<sup>14</sup> Finally, older adults have exhibited limited numeracy abilities, abilities that are associated with improved decision making<sup>15</sup> and understanding of health risks.<sup>16,17</sup>

A growing corpus of data has shown that low literacy levels are associated with poor knowledge about health and health care,<sup>18</sup> poor health outcomes,<sup>19</sup> lower usage of preventive health services,<sup>20</sup> greater utilization of hospitals and emergency care<sup>21</sup> and higher health-care cost.<sup>22</sup> Older adults with low literacy levels are more likely to exhibit health-related problems but are the least prepared and motivated to search for, understand and utilize medical-related

information. Paradoxically, this group is the least likely to disclose difficulties in understanding medical information and is more often discouraged from asking questions, reducing the chances that they will receive professional aid in tackling medical decisions.

Despite this body of research, English health authorities assume that hospital quality ratings (putting aside the methodological concerns associated with obtaining objective and accurate data) would guide patients in their decision of where to be treated. Given the low literacy and numeracy levels, however, it is not surprising that many consumers report difficulties in evaluating hospital quality data. In fact, while consumers express a desire to see hospital/doctor quality data, only few patients actually use this information in their decision making.<sup>23</sup> Reasons for this discordancy could stem from the difficulties of comprehending the information, lack of standardization among the measures, and the fact that quality reports are often not user friendly.<sup>24,25</sup> Furthermore, data<sup>26</sup> from the United States have led some to question whether providing consumers with reports on quality improves quality. In fact, the dissemination of quality report cards could have negative consequences, such as leading institutions to choose to treat only patients with a 'favourable' diagnosis.<sup>26,27</sup> To our knowledge, evaluation of the websites dedicated to quality ratings of hospitals in the United Kingdom is still missing. Initial data, however, indicate that about half of UK patients who were offered a choice relied on their GP for information, and only 5% used the NHS-dedicated website for information. People were more likely to consult family/friends or their own experience than to use the NHS websites, and more often they report choosing a hospital based on its cleanliness and low infection rate rather than by the quality of care.<sup>28</sup>

The short review aforementioned supports Arrow's and Simon's contentions regarding people's abilities to understand, obtain and process medical-related information. If close to half of the UK and US older population lack the basic literacy levels needed to adequately navigate their respective health-care systems, can we

really assume that they would be able to process far more complex information? And can we also assume, as the DoH appears to be doing, that providing consumers with a greater array of choices would give them better access to care?

### **Choice, health and prescription drug insurance in the United States**

Economists have long cherished the idea of choice, assuming it plays a vital role in both consumers' satisfaction and allowing market forces to work efficiently. Earlier psychological research has also reported that having choice offers psychological benefits, such as increased motivation and improved well-being.<sup>29</sup> Inspired partially by Simon's work, a number of researchers have come to challenge this pervasive idea, suggesting that having more choices may adversely affect consumers, by increasing their sense of regret and dissatisfaction with their choice.<sup>30–32</sup> Iyengar and colleagues, for example, have demonstrated that offering a larger choice set—of food items (e.g., jams or chocolates), job offers or 401(k) retirement plans—can reduce consumers' intention to purchase a product, or satisfaction with the product. Others<sup>33</sup> have argued that as the number of choices increases, so do the costs associated with processing the information. That is, there can be tension between the benefits of having more options and the costs associated with evaluating them or searching for more information.

Despite this emerging area of research, little controlled experimental work exists on the effects of choice on health-related decision making or the health-care market. We do, however, have other indications that the introduction of greater choice in both the UK health-care systems has not been as successful as originally conceived. In fact, a number of influential investigators<sup>34–37</sup> have been actively engaged in the policy debate over the merits of choice and competition in improving the UK health-care system. Researchers such as Le Grand have lauded the value of choice and competition, arguing that these mechanisms can improve quality of care while reducing costs.

Others have forcefully questioned the idea that choice and competition can serve as a panacea for the NHS problems.

Indeed, recent papers, including one comprehensive review,<sup>38–40</sup> have raised further questions about the utility of increasing consumer choice in the health-care arena. Policy makers previously introduced choice into the NHS in the early 1990s with the similar hope that it would alleviate inequalities and improve services. The policy, however, had little positive effect at the time, and there is little reason to believe that it will be different this time around. In fact, there is some evidence that offering more choice could actually increase inequality, in the process harming precisely those who are most disadvantaged. What is probably most interesting is that even Gordon Brown<sup>41</sup>—speaking in 2003 as the Chancellor of the Exchequer and later the Prime Minister—acknowledged the limits of markets and choice in improving the English health-care system and actually offered other possible mechanisms to achieve this aim (he did, however, reverse his opinion later on).

Having national health insurance typically means that citizens are offered (at least partial) coverage of hospital, doctor and prescription drug expenditures. In the United States, the picture is far more complicated. Medicare, for example, offers health insurance to individuals 65 and over (and others who meet certain criteria, most notably the disabled). Until 2006, however, Medicare beneficiaries were only offered hospital insurance and medical insurance covering doctor visits and other procedures (also known as Medicare part A and Medicare part B, respectively). Medicare did not offer prescription drug coverage. There were strong economic reasons for adding drug coverage a few years ago. While in the mid 1960s, the total spent on retail prescription drugs amounted to \$2.7 billion (or \$14 per capita), in 2002, the same expenditure rose to \$162.4 billion (or \$569 per capita)<sup>42</sup> and in 2006 to \$216.7 billion.<sup>43</sup> The major increase in prescription drug costs served as one of the main underlying impetuses for the passage of the Medicare Modernization Act of 2003 (better known as Part D of Medicare). Part

D, which went into effect in 2006, offers millions of Medicare beneficiaries the ability to purchase subsidized prescription drug coverage from private insurers to help them cover their drug expenses.

What does the US Medicare prescription drug benefit have to do with the NHS choice policy? We believe that valuable lessons can be garnered from the new prescription drug benefit for older Americans. Because the premiums that enrollees pay are highly subsidized by the federal government, the Part D programme has been extremely popular—not just among senior citizens, but also among insurance companies. In the typical state, there are about 45 competing insurance plans, with no state having fewer than 41 plans in 2009.<sup>44</sup> This, in turn, has resulted in large challenges for older Americans, most of whom participate in the programme and must make a choice of insurance company each year. One of the main problems is that relatively few people (5–10%) switch to a new insurer each year,<sup>45</sup> even though studies have shown that considerable savings—averaging about \$500 per year—could be had by switching.<sup>46,47</sup>

Switching to another insurer could result in savings for two reasons. First, people change their prescriptions over time. Different drug insurers have different medications on their formularies, so when one's drug regimen changes, it is possible that another insurer will be cheaper. Second, drug insurers change their own premiums, other cost-sharing requirements and formularies each year.

Lack of switching is not the only problem associated with Part D. The US experience further shows that people would be financially better off, if they had fewer choices available. This is because with so many choices, people appear to be making poor ones. Indeed, one recent study<sup>48</sup> concluded that programme beneficiaries would be best off, if there were only three drug plans from which to choose because of these savings.

Why do so few people switch plans when they probably should? Most likely, their lack of movement stems from being overwhelmed by the sheer number of choices available. In addition,

seniors fail to seek advice when they should. In spite of a Medicare website and a toll-free phone number to call, relatively few take advantage of these opportunities.<sup>49</sup> While it is unlikely that the drug benefit will change dramatically in the coming years, there are alternatives that would ease the choice burden, including (i) standardizing the benefits across companies to facilitate apples-to-apples comparisons; (ii) having Medicare take the first cut of winnowing down choices, so consumers would only have to choose among a handful of drug insurers—a proposal that was supported by nearly two-thirds of seniors in a national survey;<sup>50</sup> and more fundamentally, (iii) offering prescription drug benefits rather than insurance so that there would be no need to choose among insurers. This, in fact, is how most physician and hospital services are provided under Medicare.

### Final thoughts

On May 6, a Conservative and Liberal Democrat government was elected in the United Kingdom. Their health-care manifesto promises to provide patients the right to choose health-care providers, rate their GP and hospitals and find information about NHS performance online. Why do policy makers insist on relying on choice and competition as reform tools despite evidence countering the usefulness of this approach? While policy making is a complex and not always transparent process, a number of reasons could underlie policy makers' decisions. First, rational choice theory, one of the pillars of economics thinking, is still one of the most influential and pervasive theories among policy makers. Despite recognizing its limitations, we do not have a viable alternative framework to help policy makers in designing new policies. Even the recent financial crisis, with its clear illustration of the inherent problems of competition and choice, has failed to convert many policy makers or reverse policies based on similar mechanisms.

Some of the problems identified in the financial crisis closely parallel those that exist in the health-care market. In both cases access to information

and its complexity render the decision making very difficult. Furthermore, policy makers are responding to consumers' demands. That is, surveys and experimental work typically reveal that consumers say that they want to see more choice on the menu—whether it is jams or hospitals. Paradoxically, however, while individuals might want to have more choice, they might also do worse as the number of options increases.

Finally, in some political systems—most notably, perhaps, that of the US—special interest groups have a strong economic interest in promoting more choice. We have argued that more choice is often confusing to consumers and, in the case of Medicare Part D, has led to people purchasing more expensive coverage than they should—presumably increasing profits. (The same argument can be made for unlimited choice of hospital.) Efforts to reign in the amount of choice therefore elicit strong political opposition.

There is little doubt that choice can be good. Whether more choice is better in the health-care setting is less certain. It is even less certain whether patients are capable of obtaining, processing and understanding medical-related information, with its increasing complexity, associated risks and emotional involvement. Before the DoH decides to open the health-care market to more choices, it should be cognizant of the difficulties and challenges that more choice could pose to health-care consumers. It should also provide further safeguards, such as ensuring that patient choice is exercised in conjunction with family physicians. Indeed, the recent financial crisis reminds us of two things: that having an open and unregulated market does not guarantee better results and that government can serve as a protective mechanism for consumers and institutions alike. Arrow's arguments therefore might be more relevant than ever, serving as a reminder about the limitations of choice and competition to improve the health-care system.

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### Conflicts of interest

The authors declare no conflict of interest.

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