

HEAD TO HEAD

Is there evidence that competition in healthcare is a good thing? No

Simon Stevens (doi:10.1136/bmj.d4136) argues that, used properly, competition can improve NHS services, but **Nicholas Mays** thinks the existing evidence is unclear

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The coalition government's approach to competition in the English NHS represents a shift to a more systematic attempt to organise the NHS along the line of the former publicly owned utilities. There is to be supplier competition both in the market (providers seeking individual patients) and for the market (commissioners selecting providers for services to populations).¹ But the market for tax financed, largely free at the point of use healthcare provided by strongly regulated professionals differs markedly from, for instance, the gas and telecommunications markets. Not only is public healthcare the subject of intense public and political concern, the quality of much care is difficult for users to assess, and most of the time patients are dependent on the doctor to act as their agent. As a result, standard market theory produces ambiguous predictions of the likely effect of competition.

A recent review of international evidence on the effect of supplier competition in healthcare concluded that it is complex and equivocal.² It is also challenging to implement and regulate competition, generating considerable transaction costs. Competition is clearly easier to apply to services such as elective surgery or routine diagnostics that are episodic, are relatively easier to define, and have outcomes that are more straightforward to assess. Competition between providers is also likely to have more predictably desirable effects when prices are set under a prospective payment system (such as the NHS payment by results system)³ rather than when they are allowed to vary.

UK evidence

Until recently, almost all the evidence about the effect of hospital competition came from the very different context of the United States. However, there is growing research on the effect of Labour's reforms to the English NHS which allowed elective patients to choose their hospital. The research has been widely interpreted as showing that the policy, backed by information on quality of care, stimulated competition between hospitals and that the quality and efficiency of care improved

more quickly in the more competitive parts of the country, thereby saving lives.^{4,5}

The headline finding of two independent studies that more competition resulted in lower 30 day mortality for acute myocardial infarction requires an explanation. Some of the same researchers have shown that hospitals in more competitive markets seemed to be better managed.⁶ It was also explained on the grounds that the introduction of free choice of hospital had allowed patients, especially sicker ones, to go to the better hospitals, thereby improving outcomes.⁴

So how much weight should be placed on this evidence, and should it guide future NHS policy? My answer is that it should be interpreted more cautiously than it has been to date. The effects of hospital competition after the introduction of patient choice were small. For instance, a one standard deviation increase in the measures of competition was generally associated with only a 0.2-0.3% greater reduction in acute myocardial infarction death rates than might otherwise have been expected.^{4,5} Some of the difference seems to have been due to falls in mortality slowing in the less competitive markets after 2006 rather than improving performance in the more competitive areas.⁴ In addition, the productivity gains associated with patient choice and competition would contribute little to achieving the large improvements needed by the NHS to sustain services in the new tough financial environment.

Furthermore, the studies rely on hospital episode statistics, which limits the assessment of quality to indicators such as death and meticillin-resistant *Staphylococcus aureus* infection rates. It cannot be assumed that the improvement in survival applies to other aspects of quality. The authors claim that mortality from myocardial infarction is a good indicator of overall hospital and emergency department performance on the grounds that the facilities used to treat it are common to other hospital services,⁵ yet there is no evidence for this assertion.

Hospital episode statistics are also known to lack data on case severity, and coding of comorbidity is variable.⁷ This hampers risk adjustment, which is essential when comparing hospitals.

Although there has been much discussion of the potential benefits of further opening up the English NHS to private providers on the back of these analyses, private entry to the NHS market was not responsible for the effects identified since it was small scale during the study period (2002-8). Without knowing more about how and why the 2006 introduction of patient choice of elective provider should have had a positive effect on death rates among emergency admissions within one to two years, it is difficult to know how to advise policy makers for the future.

Despite these caveats, the two key studies are econometrically sophisticated and have used the introduction of full patient choice in 2006 to generate a quasi-experimental test of the effect of competition. They also attempt to control for a range of possible confounding factors—such as the gradual introduction of cardiac networks and primary angioplasty from 2001.⁵

Their findings suggest that hospital markets were associated with a modest reduction in death rates from myocardial infarction during a period when hospital incomes were rising rapidly, but they do not show that this effect will persist in more straightened financial circumstances⁸ or when applied to other services that were not in the payment by results system. If competition in the English NHS market is to be extended, it should be done gradually, be accompanied by provision of good information on the quality of care provided at different hospitals, and have its effects assessed.

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