

# Outsourcing care to the private sector: some reassuring evidence on patient outcomes

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Many countries have a mixed healthcare economy, with a private sector (either for profit or non-profit) making up a varying proportion of capacity, depending on the financing model. The outsourcing of routine elective care to the private sector by the National Health Service (NHS) in England has become well established over the last two decades. Introduced in 2003 to cut waiting times for high-volume surgical and diagnostic procedures, a range of privately owned healthcare providers were contracted to provide services that are free at the point of access to NHS patients. The scale of capacity boost is modest, accounting for less than 10% of all elective procedures carried out using public funding. However, the absolute amount of healthcare purchased by English NHS Trusts from independent providers continues to grow steadily, although from a low baseline.<sup>1</sup>

The use of private facilities to boost public sector capacity in England, where government-funded healthcare through the NHS is available to all citizens regardless of their income or employment status, has long been politically controversial. Fears have been expressed that current policy will lead to a form of privatisation, where private providers are contracted to run select NHS facilities, or that outsourcing grows to the point where the financial viability of some NHS providers is undermined.<sup>2</sup> There are also concerns around the impact of an enlarged private sector on workforce supply for the NHS and around the value for money of contracts agreed with the private sector.<sup>3</sup> Finally, there are concerns about the extent to which streaming low-risk patients away from NHS facilities may affect training opportunities for junior NHS clinicians.<sup>4</sup>

The role of the private sector remains a part of the ever-present debate about the optimal organisation of the NHS. A further issue is the quality and safety of care provided to NHS patients by private providers. At the start of the outsourcing programme there was dissatisfaction with monitoring arrangements, and anecdotal evidence was presented about high rates of surgical complications in some private hospitals.<sup>5</sup> Subsequent cohort studies were reassuring and suggested that outcomes at private facilities were in fact superior for some patient groups. However, these studies are now either out of date or examined only specific procedures.<sup>6–10</sup>

In this issue of BMJQS, Lilford and colleagues<sup>11</sup> make use of the national hospital administrative database for England, Hospital Episode Statistics (HES), to provide the largest and most comprehensive study to date in this field. HES has the advantage of having mandatory submission and national coverage, including all NHS patients treated in the private sector. It uses the International Classification of Diseases 10th Revision medical classification to capture diagnoses, including comorbidities and complications, and its own system, the Office of Population Censuses and Surveys (OPCS) Classification of Interventions and Procedures (version 4), to capture procedures. The study team selected 18 procedures performed with sufficient volume and with non-negligible risk before using regression and propensity score matching to compare outcomes in NHS and private facilities. They found that patients treated in the private sector had consistently shorter hospital stays and lower emergency readmission rates than those in NHS hospitals. Findings that were less consistent across operations were a higher emergency interhospital



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transfer rate in the private sector, and higher in-hospital death and non-emergency interhospital transfer rates in NHS hospitals. The absolute levels of death and readmission observed in both settings were low.

A few methodological matters are worthy of comment. Lilford and colleagues only included the first procedure of each type for each patient, resulting in the exclusion of more than a million records. This clustering could have been handled, for instance, by using robust standard errors. This would likely have led to wider confidence intervals (CIs) than those reported, but the study's actual CIs are generally narrow enough or far enough from 1 for this issue to make no difference to the interpretation. More importantly, the study is unlikely to have dealt with all confounders in their analysis. Lilford and colleagues used propensity score matching on available patient characteristics to adjust for differences in the case-mix of patients treated in different sectors. Patients treated in NHS hospitals were on average younger, less likely to be white, had higher numbers of comorbid conditions and higher risk of neighbourhood socioeconomic deprivation than patients treated in the private sector. These factors are important determinants of outcome, but HES lacks information on other important variables such as the support available at home to aid recovery. Patients without home support may be more likely to be streamed to NHS facilities, which are more likely to have the infrastructure and staffing necessary for longer hospital stays. HES also lacks information on baseline disease severity, except for hip and knee arthroplasty where data are available for some of the study period. All these data issues are likely to have reduced the impact of the propensity score matching method, and indeed this approach gave similar results to the more straightforward confounder adjustment via regression analysis. More generally, the use of propensity scores for the purpose of addressing confounding is debated, without obvious consensus.<sup>12 13</sup> Propensity score matching leads to smaller sample sizes, and it can in theory worsen the bias that it sets out to fix. For example, Guo and colleagues used simulation to compare eight propensity score models on bias reduction and sample size retention and found that no single method reduced bias across all scenarios.<sup>13</sup> Given the limitations of the available data, residual confounding due to patient selection effects is likely to be fairly strong, perhaps for some conditions more than others.

These caveats notwithstanding, the evidence base as a whole, including the current study, provides a strong reassurance that outsourced private care for NHS patients is at least as safe as that provided in NHS facilities. This is a good news story for policymakers and should be celebrated—extra capacity is delivered to a high-quality standard while remaining free to NHS patients at the point of care. Legitimate concerns about the current outsourcing model remain, but the debate

should now focus on broader policy issues such as value for money and the impact on training pathways.

It is tempting to think that the original concerns about safety in private facilities were simply scare-mongering by those opposed to private outsourcing. Lilford and colleagues point out that there were, in fact, very good *prima facie* reasons for being cautious about levels of emergency transfer from smaller private hospitals due to their lack of intensive care beds and on-call doctors. Now that these concerns have been alleviated there may be some learning points from the private sector around processes to increase patient flow. There may also be a case for an incremental expansion of the NHS outsourcing programme given the excellent quality and safety results observed.

The capacity crisis is likely to continue for the foreseeable future, and the NHS now has the additional stress of a huge backlog of elective surgery postponed due to the COVID-19 pandemic. The British Medical Association estimates that, between April 2020 and March 2021, there were 3.5 million fewer elective procedures than in the previous year,<sup>14</sup> with the total number of patients waiting for a procedure in England topping 5 million in April 2021.<sup>15</sup> The rest of the UK and many other countries face similar pressures. Where it is clinically appropriate to do so, the NHS will need the help of the independent sector for years to come. Any expansion of outsourcing will have to be done carefully to ensure that patients continue to be treated in the most appropriate setting. Clearly, the current patient selection processes and pathways are working, but we may already be at the limits of who can be safely cared for in the private sector. Any expansion should move hand in hand with performance monitoring. It is not good enough to leave the analysis of data in this area to occasional publications by interested academics: responsibility for oversight should now transfer to healthcare regulators for robust risk-adjusted evaluation on a regular basis.

Finally, the study by Lilford and colleagues is a testament to the value of data. It can be argued that the NHS is one of the most monitored and transparent healthcare systems in the world. It is for this reason that we know a lot about its performance at different levels and in comparison with other sectors. This transparency should be a model for all private healthcare activity in England, including that provided outside the NHS outsourcing programme.

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