Is the private sector better value for money than the NHS? A Scottish case study

The value for money of work contracted out to independent sector treatment centres has been hard to assess. Allyson Pollock and Graham Kirkwood look at data from the only such centre in Scotland.

The ISTC programme: time for an overhaul
Since 2000, the Department of Health has had an explicit policy of using NHS funds to contract out some elective surgery and associated clinical services to the private for profit sector. This policy of commercialisation is known in England as the Independent Sector Treatment Centre (ISTC) programme, under which the government intends that the private health care industry will provide elective surgery and other clinical services at a projected total cost to the NHS of over £5bn ($7.3bn, €5.6bn). To date the government has contracted for £2.7bn worth of services. The core objectives of the programme are to assist the NHS in reducing waiting times, support the shift from primary to secondary care, expand the options for patient choice in the provision of services, promote innovation, and build relationships between the NHS and the private sector.

The policy has been extraordinarily difficult to evaluate because few data are publicly available. Parliamentary and academic assessments of the value for money and effectiveness of the policy have been hindered by the refusal of the Department of Health to make the contracts public on the grounds of commercial confidentiality. Because crucial data have not been submitted by the private sector to Hospital Episode Statistics, quality and performance also remain unevaluated. In July 2006 the House of Commons Health Committee concluded that lack of data made an assessment of the programme impossible, and in July 2007 the Healthcare Commission could not report on quality of care because ISTCs failed to return and comply with Hospital Episode Statistics data requirements, a situation that continues. The programme remains highly controversial amid concerns that the centres are destablising NHS trusts, forcing service closures, and undermining quality of care.

After an appeal under the Freedom of Information Act in Scotland, NHS Tayside has placed the only Scottish ISTC contract in the public domain. Information that remains shrouded in secrecy in England is now publicly available in Scotland, providing the first opportunity to assess performance against the claims made for the policy.

The Scottish ISTC—background
In November 2006, NHS Tayside Health Board contracted Amicus HealthCare (Scotland), a subsidiary of Netcare (UK), which is a subsidiary of the South African health-care company Netcare, to provide elective procedures over three years for up to 8000 NHS patients at a cost of £18.7m. The annual contract comprises £5.67m for referrals for operations; £427 000 for referrals for outpatient appointments; and £144 000 for unspecified additional activity. A further supplement of £80 000 was provided by the Scottish government for patients’ travel and accommodation.

Netcare operates from an NHS hospital; the shared operating theatre is used by the NHS during weekdays and by Netcare at evenings and weekends. The Scottish Regional Treatment Centre has been accepting referrals since December 2006 and patients have been undergoing treatment since February 2007. Netcare is also involved in the first two phases, described as episodes of care, which have been contracted with data from PricewaterhouseCoopers’ 10 month review and data reported to Information Services Division

Table 1 | Comparison of annual contract referral and cost specification for Scottish Regional Treatment Centre with data from PricewaterhouseCoopers’ 10 month review and data reported to Information Services Division*

<table>
<thead>
<tr>
<th>Activity group</th>
<th>Annual number of referrals contracted for</th>
<th>Referrals according to PWC report, 1 Dec 2006 to 30 Sep 2007</th>
<th>Procedures done 1 Dec 2006 to 30 Sep 2007 and reported to ISD</th>
<th>Procedures done 1 Dec 2006 to 31 Dec 2007 and reported to ISD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint replacement</td>
<td>542</td>
<td>NA</td>
<td>3 (1)</td>
<td>35 (6)</td>
</tr>
<tr>
<td>Minor orthopaedics</td>
<td>303</td>
<td>NA</td>
<td>148 (49)</td>
<td>229 (76)</td>
</tr>
<tr>
<td>General surgery</td>
<td>1,110</td>
<td>NA</td>
<td>75 (7)</td>
<td>123 (11)</td>
</tr>
<tr>
<td>ENT</td>
<td>144</td>
<td>NA</td>
<td>59 (41)</td>
<td>122 (85)</td>
</tr>
<tr>
<td>Plastic surgery</td>
<td>113</td>
<td>NA</td>
<td>80 (71)</td>
<td>101 (89)</td>
</tr>
<tr>
<td>Urology</td>
<td>412</td>
<td>NA</td>
<td>98 (24)</td>
<td>145 (35)</td>
</tr>
<tr>
<td>Not in contract</td>
<td>Not applicable</td>
<td>NA</td>
<td>35</td>
<td>76</td>
</tr>
<tr>
<td>Total volume</td>
<td>2624</td>
<td>2200 (84)</td>
<td>498 (19)</td>
<td>831 (32)</td>
</tr>
<tr>
<td>Total value</td>
<td>£5 667 464</td>
<td>£2 642 000 (47)</td>
<td>£533 213 (9)</td>
<td>£1 035 603 (18)</td>
</tr>
</tbody>
</table>

Percentages of annual contract volume and value in brackets. PwC=PricewaterhouseCoopers; ISD=Information Services Division; NA=not available.

*Not including outpatient assessments or unspecified additional activity from the contract.
†Fife, Grampian, and Tayside health boards only (there were only four treatments from other health boards to 31 Dec 2007 worth £4908).
‡Healthcare Resource Group codes H80 and H81 were used instead of H02, which had been coded incorrectly in original contract (personal communication with NHS Tayside Scottish Regional Treatment Centre contract manager, 2008).
§All H13s counted as minor orthopaedics; there were no plastic surgery H13s (personal communication with NHS Tayside Scottish Regional Treatment Centre contract manager, 2008).
||Our estimated figure based on Healthcare Resource Group tariffs set out in the contract. We did not cost treatments that were "not in contract".
by the Department of Health as wave one and phase two, of the ISTC programme in England (list of wave one and phase two ISTC contracts for England supplied by Information Centre for Health and Social Care, Oct 2008; available on request).

In August 2005 the management consultants PricewaterhouseCoopers were contracted by the Scottish government to provide “…Financial, Commercial & Contractual Advice to the Scottish Treatment Centre Pilot Project” at a cost of over half a million pounds. In June 2008 they published a 10 month evaluation concluding that the Scottish Regional Treatment Centre represented 11% better value for money than NHS hospitals, findings described by the finance director for NHS Tayside as appearing to show “…the private sector can provide just as good, if not better, care than the NHS but at a significantly lower cost.”9 11 We explored the basis of this claim.

How did the Scottish ISTC perform against the contract?

The first problem we encountered was that neither the contract nor PricewaterhouseCoopers’ evaluation conformed to official standards for reporting data to the Information Services Division of NHS National Services Scotland, the agency responsible for producing national health statistics in Scotland.

The contract bases payment for activity on referral data and not actual treatments undertaken. The PricewaterhouseCoopers evaluation was undertaken on the same basis. To establish how many referrals resulted in treatment we asked the Information Services Division in August 2008 to extract data on all treatments reported to them by the Scottish Regional Treatment Centre from 1 December 2006 to 31 December 2007 by health board of residence, type of procedure, and month of treatment (known as Scottish Morbidity Record SMR01 data) for inpatient and day case episodes. We used the Healthcare Resource Group tariffs published in the contract to derive the actual cost of treatments reported to the Information Services Division. We then compared the referral and cost data in the contract and the PricewaterhouseCoopers evaluation with the Information Services Division’s treatment data for the 10 months from 1 December 2006 to 30 September 2007 and 13 months from 1 December 2006 to 31 December 2007, to allow for the 12 week maximum referral-to-treatment time outlined in the contract.8 9

As the table shows, the annual contract is for 2024 referrals at a total value of £5 667 464. The PricewaterhouseCoopers evaluation for 1 December 2006 to 30 September 2007 shows that the Scottish Regional Treatment Centre received about 2200 referrals at a cost of £2 642 000. However, the evaluation does not show which procedures patients were being referred for or how the total cost was derived. The Information Services Division data show that over the same period the centre undertook 498 procedures: 19% of the volume of referrals it was contracted to handle annually. By the end of September 2007, the actual value of work done by the centre was £533 213. Thirteen months into the contract the Information Services Division data show that only 831 procedures—32% of the annual contract referral volume and 38% of the PricewaterhouseCoopers referral estimate—had been undertaken, at a cost that we estimated at just over £1m, 18% of the annual contract value. This leaves £1.6m of the PricewaterhouseCoopers estimate of payments made unaccounted for. We did not analyse outpatient activity and neither did PricewaterhouseCoopers.

One caveat to our analysis is that NHS Tayside’s record for returning SMR01 data was among the worst in Scotland, with a lower than average accuracy of reporting diagnoses.12 13 SMR01 returns from NHS Tayside to the Information Services Division on 11 August 2008 were estimated to be 93% complete for the last quarter of 2007, but this level of incompleteness does not account for the low treatment numbers we found. Additionally, the Scottish Regional Treatment Centre may have under-reported for work done along with value for money analysis. Full contract details and costs must be placed in the public domain for this assessment to take place.

Main points

- In England and Scotland the first wave of contracts for independent sector treatment centres (ISTCs) have been drawn up on the basis of referrals made by primary care trusts, not actual treatments given.
- Our analysis of the only Scottish ISTC contract and a private sector report on value for money shows that the requirements for collecting and reporting data, for contracts, and for evaluation do not conform to NHS standards.
- The Scottish Regional Treatment Centre treated only 32% of annual contract referrals in the first 13 months of operation at 18% of the annual contract value. If the same patterns apply in England, up to £927m of the £1.5bn may have been paid to ISTCs for patients who did not receive treatment under the wave one ISTC contracts.
- Contracts should not be renewed and new contracts should not be signed until a proper independent evaluation has been published assessing referrals, actual treatments carried out, and payments made for work done along with value for money analysis. Full contract details and costs must be placed in the public domain for this assessment to take place.

Value for money and risk

The UK government’s claims of value for money hinge on the transfer of risks and costs from the public to the private sector through the contract. The absence of evidence to justify the government’s claims has been highlighted elsewhere.4 This contract shows that the complex payment mechanism, far from transferring risk to the private sector, increases the risks and costs to the health boards. First, the contract and payment mechanisms require the health board to meet the requisite monthly referral volume—regardless of patients’ needs—or to meet the costs associated with any shortfall, a system known as “take or pay”. In this contract Netcare is paid up to 90% of the monthly referral value regardless of the volume of referrals made. Second, the health board pays regardless of whether
patients who are referred receive actual treatment unless it can prove that the Scottish Regional Treatment Centre failed to carry out a treatment. Netcare may have been paid up to £3m for patients who did not receive treatment.

Contracts based on payment for referrals rather than actual treatments provide scope for gaming, undertreatment, and cost inflation, not least when the health board is penalised for under-referring by volume and where lack of data makes external monitoring impossible.

Implications for the English ISTC programme

Data availability and data quality
In England the government’s refusal to publish contracts is compounded by the ISTCs’ failure to provide complete, NHS-standard data on performance and actual work completed. From 32 ISTCs operating in January 2008 that returned Hospital Episode Statistics data in the second quarter of financial year 2007-8, the primary diagnosis was missing or invalid for 42.6% of patients, compared with 0.1% for NHS operated treatment centres; 13.3% had a missing or invalid primary procedure code, compared with 5.8% in NHS centres; and 64.1% had a missing or invalid ethnicity classification, compared with 16.8% in NHS centres.

Basis of payment in the English contracts
In Scotland Netcare is paid monthly on the basis of all referrals made by the health boards: a marked departure from usual standards of commissioning, reporting, and paying for activity in the NHS, which under the internal market were typically on a cost per case or block contract for treatments or services. England, like Scotland, bases its payment mechanism for wave one ISTC contracts on referrals from primary care trusts rather than on work actually done. The total value of the wave one English ISTC contracts is £1.5bn and these contracts are 100% “take or pay” based on contracted referral value. Phase two contracts have been adjusted to reflect payment for actual treatment but there is still an unspecified guaranteed minimum fee payable to the ISTCs from the primary care trusts, which according to the Department of Health varies between contracts. The Department of Health has published data on wave one and phase two ISTCs where contract completion is said to be 83%, but the documentation does not state whether this figure was based on referrals or actual treatments.

If the Scottish findings hold true for wave one in England then up to £927m of the £1.5bn may have been paid to ISTCs for patients who did not receive treatment. It is important to clarify how the data published by the Department of Health are collected, recorded, and defined, and whether they have been independently validated against Hospital Episode Statistics returns.

The Department of Health and NHS Information Centre documentation are not in accord with each other, but it would appear that Netcare has also been awarded contracts in wave one of the ISTC programme in England for general elective surgery in Manchester (nominal contract value £86.1m), a mobile ophthalmology service (£41.7m), and possibly as many as five walk in centres (value undisclosed). In partnership with the private company InHealth, Netcare appears to be awarded phase two NHS contracts for diagnostics across 47 sites in England worth £155.2m.

ISTC subsidies and training
In addition to the tariff, the independent sector treatment centres receive a subsidy known as a premium for the first five years to cover costs such as bidding costs, but the amount received is unclear.

The NHS is contractually obliged to buy back £187m of independent centre facilities at the end of the contracts if the providers do not wish to continue operating. Some of the contracts expire at the beginning of 2010. Hugh Risebrow, chief executive of the private company InterHealth Canada, which runs two of the wave one centres, said that the independent providers faced potential problems refinancing loans to fund their facilities; the Department of Health may have to step in to support the private sector.

ISTCs are explicitly allowed to cherry pick, selecting the low risk patients. Browne and colleagues have shown how case mix in ISTCs differs from that in the NHS, making any comparisons of costs and quality difficult.6 Our analysis also shows that ISTCs are performing the easier procedures within the contract. For example, data from the Information Services Division show that only 6% of referrals contracted for joint replacement and 11% for general surgery resulted in actual treatments, compared with referrals for minor procedures, which have much higher rates of treatment completion of over 80%. In either case the effect may be serious and destabilising for the NHS in terms of both finances and training. An NHS study by Clamp and colleagues showed a 19% reduction in the number of total hip and knee procedures done by junior doctors in an NHS hospital in Derby after the opening of a local ISTC.

Implications for accountability and future policy decisions

The proper and productive use of public money is an indispensable element of any modern, well managed, and fully accountable democratic state.14 The evaluation and monitoring of a contract between the public and the private sector should be relatively straightforward—payment given for services rendered—but our analysis raises four main issues, which are supported by other commentators.1,6,16 First, lack of access to data due to commercial confidence clauses means that the contracts, performance, and value for money cannot be scrutinised. Second, these problems are compounded by incompleteness of data collected and provided by ISTCs, and by the failure on the part of the commercial directorate and Department of Health to enforce adequate data collection and reporting requirements. Third, in this instance the contract and the evaluation by PricewaterhouseCoopers departed radically from normal reporting and costing of work; it is based on referrals rather than actual treatments delivered. This approach raises questions about the value for money of the contract and about the role and value for money of the independent auditors. Fourth, the government’s failure to release the value for money methodology in England, combined with lack of data, means that the claim that ISTCs are good value for money has no basis in evidence. The release and analysis of the contract in Scotland provides no evidence to support the claim that the Scottish centre is efficient or good value for money;
rather, data from the Information Services Division suggest that the centre may have been paid up to £3m for patients who did not receive treatment.

The Healthcare Commission announced a review of services at the private for profit ISTC in Eccleshill after a coroner’s verdict of death by misadventure aggravated by neglect for one patient.20 But its scope now needs to be widened: the release and publication of all ISTC contracts should be mandatory, together with their accounts, including expenditure on staffing, administration, and profits. The centres should also be obliged to collect data on patients, staff, beds, and quality of care in full compliance with the NHS. Only then can this study be replicated in England. Without the data, inequalities in distribution of resources and access to high quality care can not be monitored and parliament cannot account for the use of public money. The time has come to call a moratorium on ISTC contracts until all the existing contracts have been published, and the centres properly assessed and investigated.

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19 Appleby J. First wave ISTCs: what do we know? Health Serv J 2007 Dec 6.

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PICTURE QUIZ

Recurrent chest infection in a 5 year old boy

1 Dextrocardia, situs inversus, and patchy areas of bronchial wall thickening can be seen. The haziness in the right lower zone may indicate consolidation.

2 The diagnosis is primary ciliary dyskinesia.

3 Patients may present with sinusitis, bronchitis, pneumonia, and otitis media or with a history of neonatal respiratory distress, dextrocardia with situs inversus, or complex congenital heart diseases with situs ambiguous. Affected women may present with subfertility or ectopic pregnancy, owing to defective ciliary action in the fallopian tube; men may be infertile owing to diminished sperm motility.

4 Screening tests are measurement of nasal nitric oxide, which is consistently low in patients with primary ciliary dyskinesia, and the “saccharin test,” which assesses mucociliary function. Diagnosis is made through ciliary biopsy. The sample is analysed under light microscopy, looking at the frequency and pattern of ciliary beats, and the ultrastructure is examined through electron microscopy.

CASE REPORT

A man with high blood pressure

1 Primary “essential” hypertension or “white coat hypertension” (high in surgery but normal at home).

2 Secondary hypertension caused by drug misuse, phaeochromocytoma, primary aldosteronism, renal failure, renal artery stenosis, or coarctation of the aorta.

3 Take a history to exclude drug and alcohol misuse as causes. Ask him about symptoms of palpitations or sweating. Measure urea, electrolytes, lipids, and random blood glucose. Carry out a full blood count, liver function tests, urinalysis, ambulatory blood pressure monitoring, and resting electrocardiography. If his high blood pressure is sustained on ambulatory blood pressure monitoring, measure urinary metanephrines and perform renal ultrasonography.

4 The diagnosis was white coat hypertension. His average awake time ambulatory blood pressure was 132/78 mm Hg. He was reassured, but advised to have annual ambulatory blood pressure monitoring.

STATISTICAL QUESTION: Type I and type II errors

C