

BMJ Open Emergency contracting and the delivery of elective care services across the English National Health Service and independent sector during COVID-19: a descriptive analysis

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ABSTRACT

Background Following a virtual standstill in the delivery of elective procedures in England, a national block contract between the NHS and the independent sector aimed to help restart surgical care. This study aims to describe subsequent changes in trends in elective care service delivery following implementation of the initial iteration of this contract.

Methods Population-based retrospective cohort study, assessing the delivery of all publicly funded and privately funded elective care delivered in England between 1 April 2020 and 31 July 2020 compared with the same period in 2019. Discharge data from the Hospital Episode Statistics and private healthcare data from the Private Health Information Network was stratified by specialty, procedure, length of stay and patient complexity in terms of age and Charlson Comorbidity Index.

Results COVID-19 significantly reduced publicly funded elective care activity, though changes were more pronounced in the independent sector (–65.1%) compared with the NHS (–52.7%), whereas reductions in privately funded elective care activity were similar in both independent sector hospitals (–74.2%) and NHS hospitals (–72.9%). Patient complexity increased in the independent sector compared with the previous year, with mixed findings in NHS hospitals. Most specialties, irrespective of sector or funding mechanisms, experienced a reduction in hospital admissions. However, some specialities, including medical oncology, clinical oncology, clinical haematology and cardiology, experienced an increase in publicly-funded elective care activity in the independent sector.

Conclusion Elective care delivered by the independent sector remained significantly below historic levels, although this overlooks significant variation between regions and specialities. There may be opportunities to learn from regions which achieved more significant increases in publicly funded elective care in independent sector providers as a strategy to address the growing backlog of elective care.

INTRODUCTION

Independent sector providers (ISPs) have played a role in the provision of publicly funded elective healthcare services in

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Assessment of hospital activity across the entire independent sector and public sector in England.
- ⇒ Implications of the national block contracts used during the first wave of the COVID-19 pandemic to generate additional resources and increase capacity within the National Health Service.
- ⇒ Identifying regional variation in the use of independent sector capacity before and during COVID-19.
- ⇒ Observational study without natural control group.

England since the early 2000s.¹ Private, for-profit surgical centres have provided routine, high-volume elective procedures to National Health Service (NHS) patients, supporting incumbent governments to tackle waiting times for surgery. Although the overall contribution of ISPs to NHS-funded care was around 6% of total NHS elective activity before COVID-19,² for some elective procedures such as cataract removal, inguinal hernia repair, and hip and knee replacement, close to one in every three publicly funded treatment was performed by ISPs. In total, it is estimated that NHS commissioners spent £9.7 billion on services delivered by ISPs in 2019/2020, accounting for approximately 7.2% of the annual healthcare budget.³

For years, the financing of private healthcare through public funds has been controversial and has sparked criticism, including from professional bodies and medical staff.⁴ There remain uncertainties about the value of care provided by ISPs, the impact they might have on the NHS through its correlates like staffing, and a lack of transparency and governance of contracts struck between payers and providers of care.⁵ Despite opposition to further expand ISPs provision of publicly funded services, it was ISPs that promised a

refuge for a struggling NHS to provide additional capacity at the start of the pandemic in 2020.

Effective from 1 April 2020, NHS England and NHS Improvement (NHSEI) agreed an emergency contract with ISPs via the Independent Healthcare Providers Network,⁶⁻⁸ which was originally envisaged as covering the treatment of both patients with COVID-19 and without COVID-19. The complete terms and conditions of the contract have yet to be publicly published, however, it is known that activity-based payments were suspended and instead the NHS agreed to purchase 100% of capacity available in ISPs on an 'at cost' basis.⁹ ISPs were also free to use unused capacity for privately-funded patients and a rebate system agreed to refund payments to the NHS in this circumstance.⁹ It is estimated that this contracting arrangement cost the NHS £200 million per month.¹⁰ Fortunately, NHS hospitals were not overwhelmed with COVID-19 during the first wave of the pandemic,¹¹ and the focus shifted towards utilising the independent sector to reconvene non-urgent elective operations.⁷ ISP sites acted as designated COVID-19-free facilities,¹² increasing available capacity within the NHS and offering care to patients on growing waiting lists.¹³

The introduction of block contracts with the independent sector was necessitated by the unprecedented situation faced by the NHS and a departure from usual agreements commonly struck locally.¹⁴ The initial iteration of this national block contract ran until 31 July 2020 and was then renegotiated in favour of a greater emphasis on local agreements between NHS commissioners and independent sector hospitals. While establishing the casual impact of this national block contract is difficult as ISPs struggled with many capacity issues also experienced by NHS hospitals during the COVID-19 pandemic, the aim of this paper was to provide a descriptive analysis of elective care service delivery during the implementation of this contracting arrangement. Understanding how NHS providers and ISPs delivered care during a period of severe disruption and to what extent the independent sector was able to alleviate pressures from the NHS will be imperative to develop sustainable strategies that will help address the backlog of over six million people on a waiting list in England.¹⁵ It will inform discussions on how to design effective financing mechanisms, regulation and governance of ISPs when contracting with the NHS to safeguard public funds and incentivise activity.

METHODS

Study cohort

We analysed trends in elective care for publicly and privately funded healthcare activity in both NHS hospitals and ISPs during the first wave of pandemic in England between 1 April 2020 and 31 July 2020 compared with the same period in 2019. We focused on differences in patient case-mix, specialties, procedures and region (ie, Sustainability and Transformation Partnerships or STPs). The decision was made to analyse changes at STP

level as this has featured in other analysis of the impact of the COVID-19 pandemic on hospital bed capacity in the NHS¹⁶ and also reflects efforts by NHS England to encourage the coordination of local policy at the STP rather than CCG level since 2019.¹⁷ The study period was chosen to capture service delivery across market quadrants during a period unaffected by COVID-19 compared with a period impacted by the COVID-19 pandemic and applicable to the national block contract in place between sectors. Moreover, the study period allowed to control for any bias resulting from seasonality.

Data for publicly funded care was retrieved from the Hospital Episode Statistics database provided by NHS Digital (ie, the non-departmental public body responsible for information, data and IT systems in England). This national administrative database contains pseudonymised and unidentifiable information on all patients accessing care in the English NHS, including at accident and emergency departments, as inpatients and in outpatient settings. Privately funded care was retrieved from the Private Health Information Network (PHIN). PHIN has been mandated by the Competition and Market Authority (CMA) as being responsible for collection and reporting of activity in the private healthcare sector since 2016.¹⁸ Both datasets contain patient information including demographics, diagnosis and treatment. The data is recorded in finished episodes of care, which relates to the clinician responsible for the respective aspect of care. When analysing numbers of hospital admissions, to avoid multiple counting, we linked episodes from patient admission to discharge into complete spells. However, when analysing numbers of procedures, we utilised finished episodes of care. Specialty was coded according to main specialty codes, as defined by NHS Digital and the UK Royal Colleges,¹⁹ which is applied in both the HES and the PHIN datasets. Hospital spells were counted according to the specialty of the admitting consultant. Our analysis focused specifically on elective care. Emergency admissions were excluded as these are less likely to be impacted by contractual agreements between sectors and historically only accounted for a small proportion of patients treated at ISPs.

Study outcomes

Broadly, the healthcare system in England can be understood to have four market quadrants: publicly funded care delivered by the NHS, publicly funded care delivered by ISPs, privately funded care delivered by the NHS and privately funded care delivered by ISPs. The primary outcomes in this study were the number of total hospital discharges following an elective hospitalisation by market quadrant, and separately for the 10 specialties and procedures, which saw the largest and smallest percentage changes between the baseline period and the first wave of the COVID-19 pandemic, respectively. This was restricted to specialties with more than 1000 discharges and procedures undertaken more than 200 times collectively during our baseline period and the first wave of the pandemic.

All discharges were considered, irrespective of patient survival status.

The secondary outcomes studied relate to patient complexity, including patient age on admission and Charlson Comorbidity Index, and length of stay. We used the Charlson Comorbidity Index as a measure for patient complexity based on the number of comorbidities recorded in HES and PHIN data. The index is used widely for risk stratification in health services research and was calculated based on diagnosis codes recorded at admission.²⁰ Length of stay was calculated as the difference between day of admission and day of discharge. Patients that were admitted and discharged on the same day or without staying overnight were recorded with a zero length of stay.

Statistical analysis

We estimated the total number of patient discharges by market quadrant for the period 1 April 2019 and 31 July 2019 and the same period in 2020. We calculated percentage change between study periods for the top 15 specialities in terms of total discharges for both publicly and privately funded care across time periods for each market quadrant. We also identified the procedures with the largest percentage change for each market quadrant, with procedures classified based on OPCS-4 codes.²¹ To assess differences in patient complexity and length of stay, we performed paired sample t-tests and report p values with 0.05 considered as threshold for statistical significance. Sensitivity analysis investigated changes in patient case-mix by specialty group. All data cleaning and analyses were performed using STATA SE 15.

Patient and public involvement

No patients were involved in the development of the research question or the outcome measures. Patients were not involved in developing strategies for design or implementation of the study. The authors plan to disseminate results to patients and policymakers through virtual outreach activities and platforms provided by PHIN and the Global Surgery Policy Unit, a new partnership between the London School of Economics and Political Science and the Royal College of Surgeons of England.

RESULTS

Elective care service delivery before and during the COVID-19 pandemic

When analysing trends in total hospital admissions for elective care during the first wave of the COVID-19 pandemic compared with the same period in 2019, we find that there was significant reduction of publicly funded healthcare activity (see figure 1), though changes were more pronounced in ISPs (–65.1%) compared with the NHS (–52.7%), whereas reductions in privately funded healthcare activity were similar in both ISPs (–74.2%) and NHS hospitals (–72.9%). Hospital admissions for elective care remained significantly below historic levels during

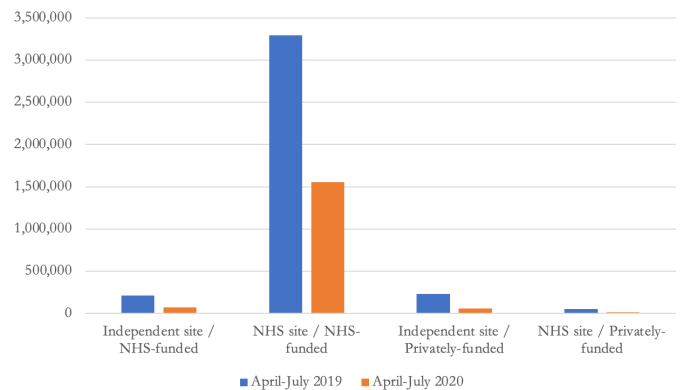


Figure 1 Total number of hospital spells by market quadrant in April to July 2020 vs April to July 2019. NHS, National Health Service.

the first wave of the COVID-19 pandemic, impacting all specialities, irrespective of sector or funding mechanisms. However, when we analyse total bed days (online supplemental material 1), we find that reductions in publicly funded healthcare activity were less pronounced in ISPs (–19.5%) compared with NHS hospitals (–54.5%). We also find that reductions in privately funded total bed days were less pronounced in private hospitals (–66.3%) compared with NHS hospitals (–82.8%). This reflects how ISPs performed less day case surgery during the first wave of the pandemic and shifted to more complex care involving greater length of stay (see below: patient complexity and length of stay).

While NHS hospitals experienced reductions across all specialties for publicly funded elective care (see table 1), with the largest decreases in trauma and orthopaedics (–82.3%), ear, nose and throat (–82.8%), and ophthalmology (–73.5%), we find that ISPs prioritised cancer care (medical oncology, clinical oncology) and cardiology. ISPs compensated some of the loss in activity but at a lower level, possibly due to higher resource intensity (eg, staffing requirements) linked to the treatment of more complex patients.

We also find that reductions in the provision of publicly funded elective care for many specialties were less pronounced in ISPs compared with NHS hospitals for several specialties, including general surgery (–30.4% vs –69.4%), general medicine (–19.7% vs –58.6%), urology (–20.3% vs –61.5%) and plastic surgery (–6.3% vs –56.9%). All specialties experienced reductions in privately funded elective care provision in both ISPs and NHS hospitals (see table 2), although clinical oncology, medical oncology and clinical haematology experienced some of the smallest reductions in activity for privately funded care in ISPs and NHS hospitals, suggesting continuation of cancer care was prioritised during the first wave of the pandemic irrespective of funding mechanism. Plastic surgery was the specialty with the largest reduction in privately funded elective care provision in ISPs (90.9%), which contrasted with only a small reduction in publicly funded elective care provision in ISPs for

**Table 1** Percentage change in hospital spells for publicly funded elective care by specialty and by sector*

Specialty	April–July 2019	April–July 2020	% Change	April–July 2019	April–July 2020	% Change
	Independent site/NHS funded			NHS site/NHS funded		
Nephrology	0	12	–	272 695	251 575	–7.7
Gastroenterology	19 789	5 480	–72.3	359 821	137 647	–61.7
General surgery	32 842	22 872	–30.4	351 480	107 427	–69.4
Clinical haematology	0	461	–	248 651	176 376	–29.1
Clinical oncology	0	1 689	–	195 461	143 606	–26.5
Ophthalmology	47 762	11 598	–75.7	205 564	54 570	–73.5
Medical oncology	0	1 266	–	178 737	132 737	–25.7
Trauma and orthopaedics	62 169	6 300	–89.9	201 652	35 594	–82.3
General medicine	1 727	1 387	–19.7	191 689	79 443	–58.6
Urology	9 624	7 667	–20.3	167 619	64 470	–61.5
Gynaecology	10 229	4 252	–58.4	96 330	31 646	–67.1
Cardiology	507	1 117	120.3	82 814	37 567	–54.6
Ear, nose and throat	3 504	1 360	–61.2	80 917	13 917	–82.8
Plastic surgery	2 477	2 321	–6.3	66 289	28 574	–56.9
Paediatrics	99	29	–70.7	58 004	37 535	–35.3

*Top 15 specialties in terms of total volume of spells for publicly funded elective care.

this specialty (–6.3%). This is likely to reflect how most privately funded plastic surgery is of a cosmetic nature in contrast to publicly funded plastic surgery which is often of a non-cosmetic nature. Specific procedures or treatments with largest increases for publicly funded care by ISPs included partial excision of breast, transurethral

resection of bladder tumour and mastectomy, even though in absolute numbers, these procedures recouped only a small proportion of the loss in high-volume publicly funded activity observed at ISPs (see online supplemental material 2 and 3). In relation to privately funded care in ISPs, activity levels for both vaginal birth and caesarean

Table 2 Percentage change in hospitals spells for privately funded elective care by specialty and by sector*

Specialty	April–July 2019	April–July 2020	% Change	April–July 2019	April–July 2020	% Change
	Independent site/privately funded			NHS site/privately funded		
Trauma and orthopaedics	42 751	7 751	–81.9	4037	466	–88.5
Medical oncology	21 134	15 086	–28.6	8236	5199	–36.9
General surgery	30 381	6 453	–78.8	4193	670	–84.0
Ophthalmology	18 108	2 994	–83.5	6452	581	–91.0
Gastroenterology	19 136	4 108	–78.5	1818	515	–71.7
Urology	14 218	3 819	–73.1	3204	587	–81.7
Plastic surgery	16 976	1 540	–90.9	1151	118	–89.7
Gynaecology	10 118	2 481	–75.5	2073	447	–78.4
Ear, nose and throat	8 036	819	–89.8	1594	101	–93.7
Cardiology	3 095	1 093	–64.7	5412	747	–86.2
Clinical haematology	2 402	1 540	–35.9	3722	2215	–40.5
Anaesthetics	5 415	663	–87.8	604	61	–89.9
Clinical oncology	1 175	980	–16.6	1890	773	–59.1
Neurosurgery	2 652	607	–77.1	591	62	–89.5
General medicine	2 250	475	–78.9	846	193	–77.2

*Top 15 specialties in terms of total volume of spells for privately funded elective care.

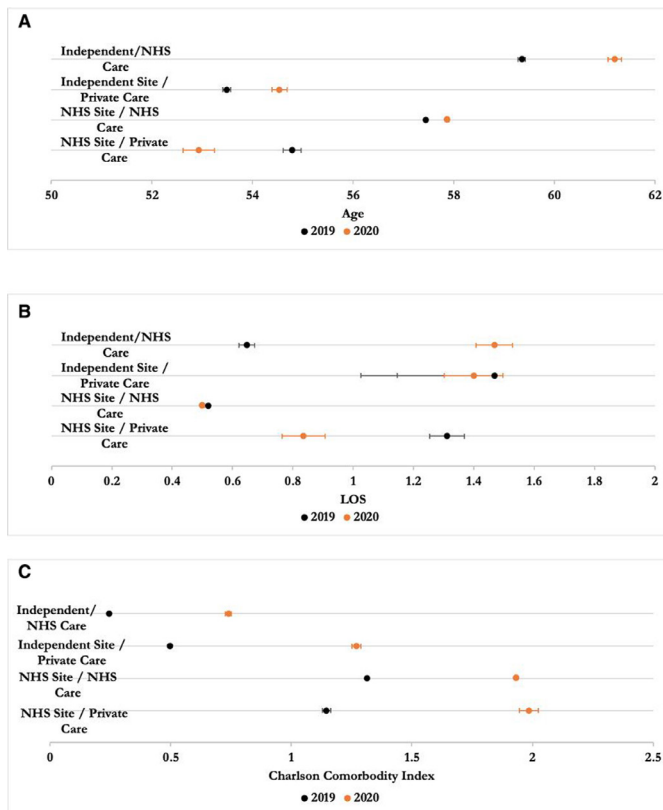


Figure 2 (A) Mean age by market quadrant for April–July 2019 and April–July 2020. (B) Mean length of stay (LOS) by market quadrant for April–July 2019 and April–July 2020. (C) Mean Charlson Comorbidity Index by market quadrant for April–July 2019 and April–July 2020. NHS, National Health Service.

section increased during the first wave of the pandemic compared with the previous year.

Patient complexity and length of stay

Previous evidence has suggested that ISPs treat patients that are less clinically complex, leaving incumbent NHS sites with sicker and costlier patients.^{22 23} It remains contested whether these observed differences in patient case mix are a true reflection of patients seen in practice, which would point to cream skimming behaviour²⁴ or are a fallacy resulting from data recording.²² It is also possible that variation in patient profiles may be influenced by patient preferences, possibly as a function of clinical advice provided by primary care physicians, or other NHS workers along the patient pathway. Our analysis indicates that ISPs shifted care towards treating more clinically complex patients during the first wave of the pandemic (figure 2), likely to reflect the prioritisation of cancer care and cardiology. The mean age of patients treated in all market quadrants increased with the exception of privately funded care by NHS hospitals (54.77 years vs 52.91 years, $p < 0.001$), with the largest increase seen in publicly funded care by ISPs (59.56 years vs 61.15 years, $p < 0.001$). Mean length of stay increased by ISPs in line with focus on more urgent and complex cases, but decreased in NHS hospitals, possibly reflecting a lower

threshold for discharge by NHS hospitals to avoid unnecessary exposure to hospital-acquired COVID-19 infection. The largest increase for length of stay was for publicly funded care by ISPs (0.36 vs 0.81, $p < 0.001$). This could reflect the suspension of high-volume elective procedures such as cataract surgery and hernia repair typically delivered as a day case. Mean Charlson Comorbidity Index increased in all market quadrants, with the largest increase seen in privately funded care by NHS hospitals (1.15 vs 2.00, $p < 0.001$) (see figure 2). Again, this likely reflects cancer care (as cancer diagnoses are incorporated in the Charlson Comorbidity Index), accounting for a larger proportion of total elective care during the first wave of the pandemic, as medical and clinical oncology consistently had the smallest reductions in activity irrespective of market quadrant (see table 2).

Subanalysis at the speciality level (see online supplemental material 3) revealed that these changes during the first wave of the COVID-19 pandemic were exemplified for certain specialities when focusing on publicly funded care by ISPs. For general surgery, patients were on average significantly older (52.01 vs 57.63, $p < 0.001$), had a longer length of stay (0.08 vs 1.05, $p < 0.001$) and had a higher Charlson Comorbidity Index (0.231 vs 0.263, $p < 0.001$). Similarly for urology, patients were also on average significantly older (51.88 vs 64.28, $p < 0.001$), stayed longer (0.76 vs 1.14, $p < 0.001$) and had a higher Charlson Comorbidity Index (0.25 vs 0.93, $p < 0.001$). Interestingly, the opposite is seen for orthopaedics, where in all market quadrants, with the exception of privately funded care by NHS hospitals, patients were on average younger, had a shorter length of stay and a lower Charlson Comorbidity Index. It is possible that this may reflect how reductions in orthopaedic care for paediatric patients were less severe than those experienced for adult patients during the first wave of the pandemic. When testing this hypothesis, we found that reductions in volume of orthopaedic elective care provision for patients younger than 18 years were smaller than those for patients aged 18 or older in all market quadrants (see online supplemental material 4). In total, hospital spells reduced by 70.6% for paediatric patients compared with 84.6% for adult patients (see online supplemental material 5).

Geographical variation in the use of independent sector capacity

Throughout the first wave of the pandemic, there was regional variation in COVID-19-related hospital admissions, with London and the North West approaching almost 100% occupancy for general and acute beds, with other regions such as the South West, Yorkshire and Humber, and the North East, less impacted.¹⁶ It is therefore not surprising we have identified regional variation in the provision of elective care during the first wave of the pandemic in our analysis (see figure 3).

The highest degree of variation experienced by STP was for publicly funded care by the independent sector, ranging from an increase of 280.8% at the Frimley Health

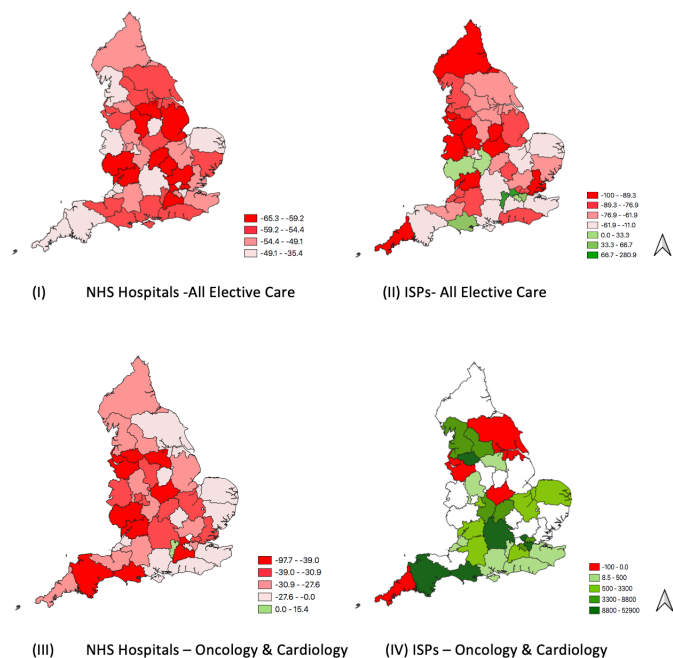


Figure 3 Growth rate on the number of admissions for NHS-funded care for NHS hospitals and independent sector providers (ISPs) by sustainability and transformation partnerships (STP)—April–July 2019 vs April–July 2020 (%). NHS, National Health Service.

and Care Integrated Care System (ICS) STP to a reduction of -99.8% at the Shropshire, Telford and Wrekin STP. A total of six STPs observed a net increase in publicly funded activity by the independent sector compared with the baseline period (ie, Frimley Health and Care ICS, North West London Health and Care Partnership, Dorset, Our Healthier South East London, Herefordshire and Worcestershire, and Coventry and Warwickshire). Almost two-thirds of STPs saw provisions of volume linked to oncology and cardiology increase (eg, at the Devon STP, activity increased from 1 case in 2019 to 1892 cases in 2020), with 19 STPs introducing these specialties for the first time due to the emergency contracting with NHSEI.

DISCUSSION

In England, ISPs have treated publicly funded elective patients for almost two decades, mostly specialising in high-volume surgical procedures such as cataract removal, inguinal hernia repair and joint replacements.² With a growing proportion of the healthcare budget spent on the independent sector, rather than investments into existing NHS infrastructure, the reliance on independent hospitals to treat NHS patients has raised concerns among the medical profession and the general public.⁴ When the COVID-19 pandemic started in 2020, NHSEI secured ISP capacity in England through emergency block contracts with the independent sector via the Independent Healthcare Providers Network, fostering a greater collaboration than ever seen before. While these contracts covered both COVID-19 and non-COVID-19

care, fortunately ISP capacity was ultimately not required for patients with COVID-19 and instead ISPs were used as sites to deliver elective care to non-COVID-19 patients on growing waiting lists.¹² While we cannot establish a casual impact of this policy, this study provides insights into trends in the delivery of elective care across the NHS and ISPs while this block contract was in place.

To our knowledge, this is the first analysis that provides a complete assessment of changes in patient care during the first wave of the pandemic as it links patient-level data for all four market quadrants, including NHS-funded care and privately funded care within NHS providers and ISPs. In doing so, we found that reductions in elective care activity in ISPs were more pronounced for privately funded care than for publicly funded care. However, we cannot state whether this is evidence of ISPs prioritising publicly funded care during our period of analysis, differences in case-mix or differences in patient pathways. Understanding trends in elective care provision by both ISPs and NHS hospitals is also complicated by the existence of several other factors experienced by both sectors including a reduced availability of staff and equipment and a reduced patient demand due to shifts in patients' willingness to attend for an operation due to fear of infection. Moreover, ISPs and NHS hospitals draw on a common workforce of hospital consultants, and it is possible that some hospital consultants chose to suspend or limit their work in the independent sector during the initial months of the pandemic due to concerns regarding infection prevention and control when operating across multiple sites or whether hospital consultants were redeployed within their NHS hospitals to assist the wider response to the COVID-19 pandemic.

In contrast to previous research which suggests that ISPs appear to treat less clinically complex patients,^{22 23 25 26} our analysis finds significant increases in average patient complexity within the independent sector during the first wave of the pandemic in terms of age and comorbidities. This likely reflects the shift towards delivering higher volumes of more complex types of cancer and cardiology care to older patients with higher comorbidity. However, the suspension of less complex types of care, such as cataract and hernia operations, and cosmetic surgery, which typically involves younger patients with fewer comorbidities may have also contributed to the apparent increase in patient complexity. As these are typically high-volume procedures in ISPs, and changes in cancer care were relatively low volume, this is likely to have contributed to the majority of changes seen in terms of average patient complexity and length of stay, which increased in ISPs and reduced in NHS hospitals. This is likely to reflect a combination of factors including the reduction in operations such as cataract and hernia surgery, which is typically performed as a day case, and the imperative to discharge earlier in NHS hospitals to increase hospital capacity and reduce risk of hospital-acquired COVID-19 infection.

Strengths and limitations

Our analysis was based on administrative hospital data and is subject to residual error resulting from misclassification. However, HES data is generally considered of high quality, as it is derived from data used for hospital reimbursement and has been used in the study of quality of care,²⁷ and policy evaluations linked to specific emergency and elective patient groups.^{28 29} The collection of information on admitted patient care by PHIN has been based on the HES dataset, and therefore shares such limitations, however PHIN remains the only source of data on privately funded care in the independent sector. While this is the first study, which has utilised PHIN data, it has been used routinely by the healthcare sector for several years as a source of information on trends in the independent sector.³⁰ Moreover, a significant strength of our analysis is that we can provide a complete pictures of healthcare market, taking account of both privately and publicly funded care by the independent sector and the NHS.

One limitation of data submitted by the independent sector seen in both HES and PHIN data is the quality of coding in relation to patient comorbidities. It is notable in our analysis that age and length of stay is on average higher in ISPs compared with NHS hospitals, but the Charlson Comorbidity Index is lower. This would suggest some degree of coding inaccuracy rather than this being a true reflection of case-mix, and therefore any comparisons between ISPs and NHS hospital related to patient comorbidities must be interpreted with caution. However, even if comorbidities are poorly recorded in ISPs, there is still merit in comparing trends before and during the pandemic, if the degree of coding accuracy has not significantly changed during the study period.

Finally, a further limitation of our analysis is that we chose to restrict our analysis to a 4-month period between April and July 2020 compared with the previous year. There will of course be further insights from analysing additional time periods during subsequent waves of COVID-19, and this should indeed be the focus on additional work. However, we chose to restrict our analysis to this time period as the focus on this paper is to understand trends in elective care provision across the English healthcare system during a period with national block contracts between the NHS and independent sector in place.

Policy implications and conclusion

The NHS has struggled to keep up with demands for its services even preceding the COVID-19 pandemic.³¹ Due to a combination of policy failures that encouraged cost cutting and discouraged long-term capital investment, capacity constraints have adversely impacted on patients, from long waiting times at accident and emergency departments,³² to cancelled elective surgeries³³ and poor patient outcomes.³⁴ The pandemic has uncovered a lack of resilience in the NHS driven by poor capacity that weakened its ability to cope with a stressor such as the

COVID-19 pandemic. If utilised effectively, the availability of additional capacity at ISPs can therefore be a crucial resource to serve those that have been struggling to receive the care they need. Until substantial investments into NHS infrastructure materialise, contracting with the independent sector may be one of the only available solutions to expand service provision at a scale required to tackle the six million patient-strong waiting list, in the short to medium term.³⁵

Our analysis has shown that during the first wave of the COVID-19 pandemic, ISPs increased activity for a few select specialties and procedures, although these increases were relatively small in comparison to total reductions in publicly funded elective care and were concentrated in certain regions. Despite a national block contract being in place, a significant amount of capacity in the independent sector remained underutilised, although reductions in publicly funded care were less pronounced than for privately funded care. While it is challenging to understand the impact of this contracting arrangement during a period of time when ISPs also experienced many capacity issues similar to NHS hospitals, it is possible that block contracts did not sufficiently incentivise publicly funded elective activity in the independent sector. Moreover, it is also possible that due to the urgent nature of the patients' clinical condition, many patients treated at ISPs during the study period were direct referrals from NHS consultants rather than patients accessing ISPs via the patient choice mechanism commonly pursued for high-volume, low-complexity procedures pre-COVID-19. Future contracts with the independent sector should therefore take into consideration the integration between care pathways within NHS providers and ISPs, particularly for complex and urgent conditions, in addition to incentivising activity where it is most needed to release pressure from the NHS. Our analysis shows also that there are opportunities for the regions which successfully achieved significant increases in publicly funded elective care in the independent sector to share their experiences and provide insights into how to realise effective collaboration at the local level.

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Patient consent for publication Not applicable.

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Data availability statement Data may be obtained from a third party and are not publicly available. The data controller of the data analysed on publicly funded care is NHS Digital, whereas the data controller of data analysed on privately funded is the Private Health Information Network. Patient-level data are available subject to their information governance requirements. The authors will be able to share aggregate data and coding scripts upon request.

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