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Key findings

- In addition to externally funded care, the independent sector provides around one in six NHS-funded perioperative care episodes and this proportion is increasing.
- A total of 174 independent hospital sites agreed to participate NAP7, a significant increase from previous projects, but representing only 39% of contacted hospitals.
- There was poor engagement with the Baseline Survey (13% response rate from participating hospitals, 4% of the sector, vs 72% of all NHS hospitals), meaning that data were not likely to be representative of the whole sector. This precluded analysis of the Baseline Survey.
- Forty-five percent of participating hospitals (approximately 13% of the sector) agreed to take part in the Activity Survey and data from 1,912 cases were submitted.
- Compared with the NHS, the caseload in the independent sector is less comorbid, with fewer patients who are at the extremes of age, frail or severely obese. It comprises a large proportion of elective orthopaedic surgery, undertaken mainly during weekday working hours.
- The survey raises the possibility of lower compliance rates with monitoring recommendations in the theatre complex, which merits further investigation.
- The 17 cases of perioperative cardiac arrest from the independent sector account for only 1.8% of all cases reported to NAP7. It is not possible to determine to what extent this reflects a failure to report cases. The lack of certainty over the extent of reporting and small numbers with low Activity Survey data returns mean that conclusions must be cautious.
- The reports demonstrate perioperative cardiac arrests in the independent sector tended to occur in elective patients, with lower ASA scores and less frailty than in the NHS, reflecting the case mix in this sector.
- The reported cases showed that life-threatening emergencies requiring immediate life-saving treatment, including haemorrhage, anaphylaxis, cardiac arrhythmia and pulmonary embolus, can and do occur in the independent sector.
- There were examples of good practice and of individuals performing to a very high standard.
- Equally, there was evidence of poorer quality care, including delay in recognition and treatment of patient deterioration and poor delivery of care.
- The overall outcome of cardiac arrests in the independent sector is similar to that in the NHS, although, given the case mix differences, it might be hoped that it would be better.
- The overall assessment of quality of perioperative cardiac arrest care was less likely to be favourable for reports from the independent sector than from the NHS, but this is significantly hampered by uncertain assessments, perhaps reflecting poor quality reports.
- NAP7 has not received sufficient data returns from the independent sector to enable us to determine whether perioperative care in that setting is more, equally or less safe than in the NHS.
- We repeat the recommendation made in NAP6, that NHS and other organisations funding the care of patients in independent sector hospitals should work with regulators and inspectors to ensure robust data collection and reporting and that all independent hospitals are included in national audits and registries. Only through this can the comparative safety of the independent sector be determined.

What we already know

The care of a substantial proportion of patients undergoing surgery and anaesthesia in independent hospitals is funded by the NHS.

The independent healthcare sector in the UK consists of up to 600 sites delivering care (PHIN 2021) and includes patients receiving care on a privately insured and self-pay basis, and NHS patients who may have chosen care in these settings or in stand-alone independent sector treatment centres, through the NHS Choice Framework (<https://www.gov.uk/government/publications/the-nhs-choice-framework>) or through NHS organisations purchasing care in the independent sector. The ratio of these funding streams across different sites and providers will vary. Some of these sites will include independent healthcare delivered at an NHS hospital.

Before the pandemic, approximately 12% of total NHS-funded elective inpatient care (7% of outpatient treatments) was undertaken in the independent sector, including 23% of orthopaedic activity (Peytrignet 2022). The proportion of planned NHS inpatient care rose to 16% in 2022, varying by speciality, accounting for around 30% of orthopaedic activity. There is some evidence of imbalance in the increased provision of NHS care within the independent sector, with this being twice as frequent in areas of low social deprivation compared with areas of high social deprivation.

There is uncertainty about what will happen in the future but, in view of the waiting list backlog, it is plausible that the proportions will increase further, either through self-pay/insured access or via the NHS-funded route. The independent sector therefore provides around one in six planned inpatient hospital episodes and around one in three for orthopaedic surgery. It provides a substantially smaller proportion of emergency care. In 2017, almost half of the patients receiving care in the independent sector were NHS funded (CHPI 2017).

Most independent sector hospitals are small, separate or isolated from larger hospitals. They do not have access to all the clinical services that might be present in a district general or tertiary hospital providing 24-hour emergency services. Unlike in the NHS, consultants are not employed by the hospital but provide clinical services, usually working as solo providers although they may form part of a group. There are generally no departments of anaesthesia, as are seen routinely at NHS sites.

The need for audit and quality assurance of care delivered in independent sector hospitals has been highlighted before as has the need to engage with national audits (Leys 2014, Cook 2018). NAP7 provided an opportunity to examine the preparation for, prevalence and management of perioperative cardiac arrest as measures of quality of care in the independent sector, with a further opportunity to compare such care to the NHS setting.

What we found

This section is prefaced with a caveat: analysis of the independent sector data is problematic. Low rates of returns in the Baseline Survey and the lack of a confident independent sector activity denominator mean that it is difficult to be

confident that the data are representative of the sector. We therefore present an overview but advise caution in detailed comparisons.

To improve the engagement of the independent sector, we contacted the Independent Healthcare Provider Network (IHPN) and the IHPN nominated a representative to sit on the NAP7 panel.

We contacted 442 independent providers (that we identified from IHPN members listed on their website) to ask for enrolment in the NAP7 project; 174 hospitals agreed to take part in NAP7. Several organisations enrolled all their hospitals.

For the Baseline Survey, we received 23 responses (31 submitted with 8 duplicates), giving a 13% response rate. We estimated this to reflect only 4% of all independent sector facilities. We judged this too low to enable useful analysis and reporting.

An independent sector Activity Survey was conducted at approximately the same time as the NHS survey; 78 hospitals indicated that they would take part (45% of enrolled hospitals, 13% of the estimated number of independent sector hospitals) and we received approximately 1,900 datasets (approximately 8% of the number received from NHS hospitals).

Activity Survey

The survey can be summarised as follows, but the low response rate from the independent sector merits caution. Compared with the NHS Activity Survey those in the independent sector were marked by:

- lower ASA class (ASA 1–2 92% vs 73%)
- fewer children (4% vs 14%) and children younger than five years (1% vs 5%)
- similar rates of older patients (12% vs 13% age > 75 years) but not very elderly (1% vs 3% aged > 85 years)
- similar rates of obesity (23% vs 26% body mass index, BMI, > 30 kg m⁻²) but fewer patients who were very obese (3% vs 4% BMI > 40 kg m⁻²)
- more elective orthopaedics (41% vs 10%) similar amounts of general surgery (10% vs 9%) but little obstetrics (<1% vs 13%)
- a higher proportion of work during the week (95% vs 89%)
- most work in-hours (96% vs 90%) and rarely overnight (<1% vs 5%)
- a broadly similar distribution of surgical complexity (36% vs 28% major or complex)
- somewhat lower monitoring rates compliant with guidelines when transfer from anaesthetic room to theatre (49% vs 67%) and from theatre to recovery/critical care (29% vs 51%).
- lower rates of processed EEG (pEEG) monitoring during total intravenous anaesthesia (TIVA) (35% vs 63%).

Perioperative cardiac arrest case reports

The case reporting form identified whether reports came from the NHS or the independent sector and 17 (1.9%) of 881 reports were from the independent sector; 5 patients died and 12 survived. Among survivors only one was reported to have severe harm, with all others experiencing moderate harm.

Elective orthopaedics, general surgery and gynaecology accounted for two-thirds of cases, a greater proportion and narrower range of surgical specialties than in the NHS cohort. Approximately 70% of cases occurred in patients who were overweight or obese, a slightly higher proportion compared with the NHS Activity Survey population distribution. Reports to NAP7 from the independent sector, when compared with reports from the NHS, were:

- less likely to be aged < 18 years (0% vs 12%) or > 75 years (12% vs 25%)
- more likely to be ASA 1 and 2 (88% vs 25%)
- less likely to be frail (17% vs 29%)
- more likely to be undergoing elective surgery (94% vs 26%).

Sex, distribution of BMIs, extent of surgery and type of anaesthesia were not notably different between cases reported from the independent and NHS sectors.

Perioperative cardiac arrests reported from the independent sector predominantly (82%) occurred in the operating theatre and mostly (76%) after induction of anaesthesia and before emergence. There were no major differences in the phase of the perioperative pathway at which the cardiac arrest occurred, nor in the initial cardiac rhythm or duration of cardiac arrest, compared with cases from the NHS.

Few (18%) cardiac arrests occurred after leaving theatres or on the ward but, in reports from the independent sector, cardiac arrest occurred less commonly out of hours than in reports from the NHS (12% vs 31%).

In three-quarters of reports, additional anaesthetic assistance was called for; in all these cases, it was reported to arrive within three minutes. The number of individuals present at the arrest was lower in the independent sector than in NHS hospitals at time of arrest (median 1, IQR 1–1, vs 2, IQR 1–3) and during the arrest (median 1, IQR 0–2, vs 2, 1–4; Figure 14.1).

The principle causes of cardiac arrest are shown in Table 14.1. The proportion of cases whose key cause was determined by the NAP7 review panel to be patient-related, surgery-related or anaesthesia-related were similar in both settings.

After cardiac arrest, of 16 responding to this question, 8 reports indicated that the patient was transferred. As four patients did not survive the initial event, this represents approximately 75% of patients requiring transfer to another hospital. In all cases, the reason for transfer was that the level of care required could not be provided in the current hospital.

In one case reported to NAP7, the consultant reported feeling undermined by criticism of periarrest care and early post-resuscitation care by others after the patient was transferred to another hospital.

Outcomes were similar in independent and NHS sectors; similar proportions survived the initial arrest (71% in independent sector reports vs 76% in NHS reports) and were alive at the time of the report (53% vs 59%). The proportion of patients experiencing harm appeared modestly higher in the independent sector cohort than in the NHS cohort (24% vs 9%) but as outcome was unknown for half of patients this is based on very small numbers.

Debrief after cardiac arrest was reported more commonly in the independent sector than in NHS reports, including all fatalities and two-thirds of cases in which the patient survived resuscitation.

In 15 cases, data were sufficient to judge the quality of care and these are shown in Table 14.2. Reports from the independent sector were more often judged by the review panel to be unclear than reports from the NHS, which suggests a less well completed form. In reports from the independent sector, care was judged to be good during and after cardiac arrest less often and poor before cardiac arrest more often than in reports from the NHS, but the increased rates of 'uncertain' judgement partially accounted for this difference.

Across the whole NAP7 dataset, there were three deaths in patients who were ASA 1–2 whose deaths were judged by the review panel to not be the result of an inexorable process and were therefore deemed unexpected. Two of these deaths occurred in the independent sector. One occurred in theatre and one in recovery. Both patients received prolonged resuscitation and were attended by at least two consultant anaesthetists. Neither patient was successfully resuscitated. One was most likely an unexpected primary cardiac event (care was judged

Table 14.1 Main causes of perioperative cardiac arrests in the independent sector reports

Cause of cardiac arrest	Proportion of causes in reports from the independent sector (n = 17) (%)	Proportion of causes in all NHS reports (n = 864) (%)
Anaphylaxis	18	4
Major haemorrhage	18	18
Cardiac ischaemia	12	8
Drug error	12	2
Reflex vagal outflow	12	4
Bone cement implantation syndrome	6	2
Isolated severe hypotension	6	6
Pulmonary embolism	6	2

Figure 14.1 (A) Number of staff present at the time of cardiac arrest in independent sector reports. (B) Number of staff present at the time of cardiac arrest in NHS reports. (C) Number of staff present at any time during the cardiac arrest in independent sector reports. (D) Number of staff present at any time during the cardiac arrest in NHS reports.

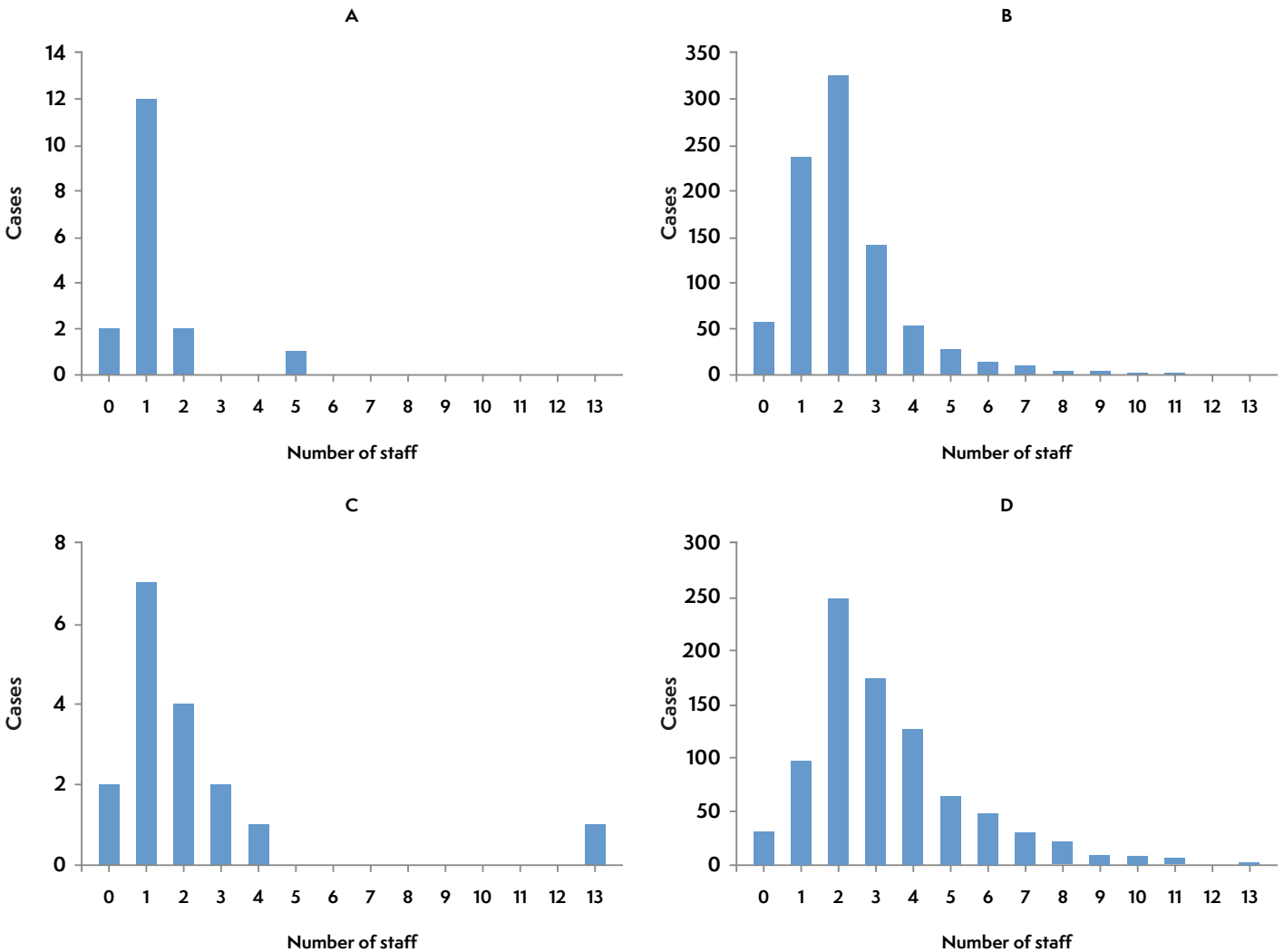


Table 14.2 Quality of care before, during and after cardiac arrest: reports to the independent sector ($n=15$) compared to reports from the NHS ($n=713$). Uncertain indicates there was insufficient detail to judge quality of care.

Period	Good care (%)	Good and poor (%)	Poor care (%)	Uncertain (%)
Before cardiac arrest	47 vs 46	7 vs 23	20 vs 11	27 vs 20
During cardiac arrest	53 vs 80	13 vs 7.5	0 vs 1.7	33 vs 11
After cardiac arrest	60 vs 79	7 vs 5.2	0 vs 1.2	33 vs 14
Overall care	47 vs 52	20 vs 29	7 vs 2.3	27 vs 16

good throughout) and in one case the cause was uncertain but high doses of local anaesthetic were noted to have been administered (care was judged good and poor throughout).

Examples of good care included:

- prompt initiation of cardiopulmonary resuscitation
- well-managed anaphylaxis by a solo anaesthetist
- support provided by other anaesthetic personnel
- rapid transfer for cardiac investigations.

Concerns raised about care included:

- poor risk stratification preoperatively leading to surgery on high-risk patients (ASA 4 and frail)
- excessive dose of anaesthetic drug
- excessive dose of adrenaline used to treat bradycardia leading to tachyarrhythmia
- inappropriately high dose of adrenaline during resuscitation
- failure to use an appropriate algorithm to treat bradycardia
- delay in starting treatment

Independent sector

- poor communication with the surgeon
- no other anaesthetist present or available to assist during unexpected cardiac arrest
- a problem with calling for help
- delay in transferring a patient to another hospital.

Discussion

Some factors inherent in the independent healthcare sector are likely to make healthcare safer than in the NHS and other factors may mean that emergency care is more complex and more difficult to deliver in a timely manner. NAP7 provided an opportunity to explore these factors, which has not been entirely successful. There are both positive and negative findings regarding the independent sector in NAP7. Many findings echo those reported five years ago in NAP6 (Cook 2018).

Factors tending to make the independent sector care lower risk than NHS care (many of which are confirmed in our Activity Survey) include:

- low-risk patients are accepted for care, with higher-risk patients screened out (CHPI 2017)
- few small children or frail patients
- almost exclusively elective care
- almost exclusively consultant-delivered care
- minimal night time care
- mostly lower-risk surgery, with a small proportion of high-risk and complex procedures.

Factors tending to make provision of emergency care in the independent sector more challenging to deliver, particularly out of hours (though not all apply to all independent sites), include:

- isolated location
- isolated practice and absence of anaesthetic or surgical departments
- lack of experience dealing with sick patients on the wards
- limited medical cover out of hours without senior resident cover
- infrequent emergencies potentially leading to unfamiliarity when they do occur
- lack of on-site pathology and blood bank
- frequent lack of other supporting medical, surgical and interventional radiology specialties
- lack of multispecialty cardiac arrest team and critical care outreach teams
- lack of high dependency or critical care (Leys 2014)
- need to transfer patients to other (NHS) facilities in the event of complications of care.

Independent sector hospitals should have the same levels of preparedness for managing cardiac arrest as NHS hospitals and are described in the *General Provision of Anaesthesia*

Services (RCoA 2023a). Key features include having a lead for resuscitation and immediate access to emergency policies and algorithms. There should be an immediately available anaesthetist or at least one other advanced life support provider (RCoA 2023a). Drugs, fluid and equipment required for resuscitation and managing postoperative complications should be available within three minutes and should be regularly maintained (RCoA 2023b). Personal aspects of preparedness include that all anaesthetists should complete training in adult and paediatric life support and that knowledge and skills should be maintained through continual professional development and planned as part of annual appraisal (RCoA 2023a) and that all clinical staff working in recovery should be certified to a standard equivalent to immediate life support providers (RCoA 2023b).

Engagement and response rates

Engagement from the independent sector appeared good, with more sites signing up to NAP7 than for previous projects. The collaboration with IHPN is welcome and we thank all those from the independent sector who have contributed. Despite this, return rates were lower than anticipated. For the Baseline Survey, we likely have data from less than 5% of the sector, and for the Activity Survey perhaps 15% of sector activity. The relatively small number of cases, allied with low response rates from other project phases, make it likely that a substantial number of cases have not been reported, but this is impossible to confirm.

The reasons underlying the low data return are unclear. Potential reasons include the impact of COVID-19 (which applied equally or more so to the NHS), anaesthetic staff not being on site every day, the absence of anaesthetic departments (specialty governance leads, morbidity and mortality leads etc) and lack of electronic patient data systems to facilitate data collection.

The low return rates have implications for interpreting the data we have received, meaning there is significant uncertainty in what we report. This uncertainty extends to us being unable to determine levels of safety within the sector.

The low rate of engagement with the project also has wider implications for the sector and those who fund care there.

Nature of events

The independent sector should be a low-risk treatment location. Despite the fact that low numbers of perioperative cardiac arrests were reported to NAP7, it is clear that such events do occur and that many are unpredictable. It is a basic requirement that all staff responsible for care in this sector work in an environment that facilitates early recognition and management of perioperative cardiac arrest and that all anaesthetists in particular should have the training and skills to appropriately manage cardiac arrest.

Anaphylaxis was the most common cause of cardiac arrest, with orthopaedics the most common surgical group. As previously noted in NAP6 (Cook 2018), this probably reflects the case mix in the independent sector and routine use of prophylactic antibiotics. It reinforces the need for organisations and individuals

to have clear plans for recognising and managing anaphylaxis. A case of cardiac arrest from bone implantation syndrome also highlights the need for training in approaches that minimise the risk of this happening and in its management (Association of Anaesthetists 2015; see also [Chapter 28 Older frailer patients](#)).

Surgery-related causes of cardiac arrest included surgical haemorrhage and asystole/severe bradycardia due to vagal stimulation. Organisations and practitioners need to be equally aware and prepared for these events. Patient-related events included cardiac ischaemia and pulmonary embolus. There is potential for such events to increase in the independent sector, as demographic changes seen in the NHS surgical population are likely to also be seen in the independent sector. As the independent sector takes on a greater proportion of NHS care, particularly orthopaedic surgery, it is inevitable that age-related comorbidity will be present.

That two of three 'deaths in low-risk patients' in NAP7 occurred in the independent sector is notable, but numbers were small and it is difficult to draw conclusions beyond this fact.

Quality of care

In terms of quality of care, there were examples of very high-quality care. This included teams working together, complex care managed to a high quality by an individual, and prompt transfer of patients to other hospitals for ongoing critical care.

There were also some concerns. Narratives included instances of poor care such as poor case selection, drug dosing errors contributing to cardiac arrest, delayed or ill-judged management of cardiac arrest and poor communication between or within teams. As care is consultant delivered, this should not be the case, but some consultants may manage emergencies infrequently leading to reduced familiarity and emphasising the need for annual practice updates.

Outcomes were broadly similar for both the independent sector and NHS. As patients in the independent sector are a preselected lower-risk cohort and there is very little emergency surgery undertaken, it would be reasonable to expect outcomes to be better in the independent sector. This is an area that likely merits more study.

It was reassuring that when assistance was called for, it generally arrived promptly. In NHS hospitals, anaesthesia care is frequently delivered by more than one anaesthetist and many theatres are generally active simultaneously. This and the hospital scale enables rapid response to clinical emergencies including senior expert assistance. The nature of independent sector practice means that both anaesthetic and surgical care are commonly delivered by a solo consultant working with other members of the theatre team. Many independent sector hospitals are small and there may be no other anaesthetists present, particularly if work in one theatre proceeds out of hours, which is common. These and other factors limit the availability and number of staff who can assist with an emergency; this was discussed at length in the NAP6 report (Cook 2018) and has been highlighted before

(Leys 2014). It is therefore particularly important that robust data are delivered from the independent sector to enable examination of safety by projects such as NAP7.

We found that there were fewer members of staff present both at the point of cardiac arrest and during resuscitation in the independent sector than in the NHS. While it is not guaranteed that a greater number of rescuers increases quality of care, it is likely that responsibility for managing a cardiac arrest falls predominantly on the consultant anaesthetist. A perioperative cardiac arrest in an isolated setting, with few able to assist and with critical care facilities at a distant site, is an extremely demanding occurrence. An absence of experienced colleagues increases workload and stress. In one case, the consultant anaesthetist reported receiving 'little actual input' from others who attended and that some contributions were even 'a distraction'. Independent sector hospitals need to ensure that, whatever surgery is taking place, sufficient staff can respond to critical events and that the response includes appropriately skilled staff.

After successful resuscitation, most patients were transferred to another hospital for specialist and continuing treatment, most commonly to critical care. Therefore, management of a cardiac arrest in the independent sector involves not only resuscitation, but early post-resuscitation care and transfer, often of a critically ill patient who may be physiologically unstable, to another hospital. This is complex care with 'organisational, logistical and patient-safety challenges' and may fall outside some consultant anaesthetists' recent experience or skillset (Cook 2018). Transfers of patients from the independent sector to NHS facilities are common (CHPI 2017) but few involve critically ill patients. Whereas intra- and interhospital transfers of the critically ill in the NHS routinely involve a specialist intensivist or anaesthetist with specific critical care and transfer skills (RCoA 2023c, FICM 2019), such an arrangement will often be less easy, or even impractical, to arrange in the independent sector. This may be easier to achieve when anaesthetists work together collaboratively in the independent sector. While local agreements for transfer of patients from the independent sector to NHS critical care facilities will commonly be in place, the mechanism by which this takes place for critically ill patients may not be defined.

Adult critical care transfer services (NHSE 2022) have been commissioned by NHS England and NHS Wales in recent years and it is likely that the provision of dedicated critical care transfer teams may be beneficial in facilitating the transfer and providing post-cardiac arrest stabilisation and care before transfer. Independent sector patients should be treated equitably by services that are in operation and receive the same standards of transfer care from these specialist teams as patients moving from one NHS facility to another.

Debriefs after cardiac arrests were more common in the independent sector than in the NHS, and this is to be applauded and encouraged to ensure that teams can learn from these uncommon events and where necessary to address any wellbeing issues that might arise.

Recommendations

National

- Independent Healthcare Provider Network and Private Healthcare Information Network (PHIN) should work with commissioners of care, regulators and inspectors to improve engagement with safety-related national audit projects in the independent hospital sector to assess the quality and safety of care delivered.
- The Royal College of Anaesthetists should consider demonstration of active involvement in its audits as a pre-requisite for accreditation of independent sector hospitals in the Anaesthesia Clinical Services Accreditation scheme.
- The Care Quality Commission should include compliance with minimum standards of monitoring during anaesthesia as part of routine checks of independent sector hospitals.
- PHIN and IHPN should mandate the collection of data in all independent sector sites relating to perioperative activity and adverse events and provide data of outcomes.
- The independent sector, collectively, should work collaboratively with regional NHS Adult Critical Care Operational Delivery Networks to align guidance and standards of care.
- Paediatric and Adult Critical Care Transfer Services should undertake transfers of patients from independent sector facilities to NHS hospitals as part of their usual activity, providing for all critically ill patients equity of access to high standards of transfer care.
- Independent sector facilities should collaborate with regional NHS critical care transfer services to improve awareness, referral processes and patient safety prior to and during transfer.

Institutional

- Independent sector hospitals should adhere to the same levels of preparedness for managing cardiac arrest as NHS hospitals, as laid out in the Royal College of Anaesthetists' *General Provisions for Anaesthetic Services 2023*.
- Each hospital should have (and disseminate) a robust and clear policy for providing assistance during a perioperative cardiac arrest. This should include summoning additional appropriately trained senior clinicians where this is likely to be of benefit.
- Each independent sector facility should have a formal local agreement in place to enable immediate transfer of a critically ill patient to a local hospital with critical care facilities when this is needed. This agreement should include the independent sector provider, NHS provider, regional ambulance service and, where available, dedicated critical care transfer service.
- Each independent sector facility should have (and disseminate) a protocol for transfer of critically ill patients to another hospital. This policy should include minimum standards of care for transfer.

Individual

- Anaesthetists working in independent sector organisations should participate in national audits and registries.
- Anaesthetists working in independent sector organisations should be trained and prepared to manage life-threatening complications, including cardiac arrest and its causes.
- Anaesthetists working in independent sector organisations should be trained in and prepared to transfer a critically ill patient to another hospital for further care. Where they do not possess these skills, another clinician with these competences should be enrolled in the patient's care.

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References

- Association of Anaesthetists 2015: Association of Anaesthetists, British Orthopaedic Association, British Geriatric Society. Safety guideline: reducing the risk from cemented hemiarthroplasty for hip fracture 2015. *Anaesthesia* 2015; 70: 623–6.
- CHPI 2017: Centre for Health and the Public Interest. *No Safety Without Liability: Reforming private hospitals in England after the Ian Paterson scandal*. London: Centre for Health and the Public Interest; 2017. <https://chpi.org.uk/wp-content/uploads/2017/10/CHPI-PatientSafetyPaterson-Nov29.pdf> (accessed 15 March 2023).
- Cook 2018: Cook TM, McGlennan A. The independent sector. In: *Anaesthesia, Surgery and Life-threatening Allergic Reactions. Report and findings of the Royal College of Anaesthetists' 6th National Audit Project: perioperative anaphylaxis*. Cook TM, Harper NJN., eds. London: Royal College of Anaesthetists; 2018. pp. 225–9.
- FICM 2019: Faculty of Intensive Care Medicine, Intensive Care Society. *Guidance On: The Transfer of the Critically Ill Adult*. London: Intensive Care Society; 2019. https://www.ficm.ac.uk/sites/ficm/files/documents/2021-10/Transfer_of_Critically_Ill_Adult.pdf (accessed 15 March 2023).
- Leys 2014: Leys C, Toff B. *Patient Safety in Private Hospitals: The known and unknown risks*. London: Centre for Health and the Public Interest; 2014. <https://chpi.org.uk/papers/reports/patient-safety-private-hospitals-known-unknown-risks> (accessed 15 March 2023).
- NHSE 2022: NHS England. *Adult Critical Care Transfer Services*. London: NHS England; 2022. <https://www.england.nhs.uk/publication/adult-critical-care-transfer-services> (accessed 25 May 2023).
- Peytrignet 2022: Peytrignet S, Hughes J, Coughlan E *et al* Waiting for NHS hospital care: the role of the independent sector. London: Health Foundation; 28 July 2022. <https://www.health.org.uk/publications/long-reads/waiting-for-nhs-hospital-care-the-role-of-the-independent-sector> (accessed 10 March 2023).
- PHIN 2021: Private Healthcare Information Network. How does PHIN get data? Available at <https://www.phin.org.uk/about/how-do-phin-get-data> (accessed 24 March 2023).
- RCoA 2023a: Royal College of Anaesthetists. *Chapter 1: Guidelines for the Provision of Anaesthesia Services: The good department*. London: Royal College of Anaesthetists; 2023. <https://rcoa.ac.uk/gpas/chapter-1> (accessed 15 March 2023).
- RCoA 2023b: Royal College of Anaesthetists. *Chapter 2: Guidelines for the Provision of Anaesthesia Services for the Perioperative Care of Elective and Urgent Care Patients*. London: Royal College of Anaesthetists; 2023. <https://rcoa.ac.uk/gpas/chapter-2> (accessed 15 March 2023).
- RCoA 2023c: Royal College of Anaesthetists. *Chapter 5: Guidelines for the Provision of Emergency Anaesthesia Services*. London: Royal College of Anaesthetists; 2023. <https://rcoa.ac.uk/gpas/chapter-5> (accessed 15 March 2023).