



Review of issues raised in correspondence with the Auditor General for Wales

Welsh Ambulance Services NHS Trust

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The team who delivered this report comprised David Rees and Virginia Stevens (KPMG) under the direction of David Thomas.

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Summary report

Background

1. In January 2015, a member of the Welsh Assembly (AM) wrote to the Minister for Health and Social Services (the Minister) setting out a number of propriety and value for money concerns he had received from members of the Welsh Ambulance Service NHS Trust's staff concerning practices within the Trust. The Minister sent on the correspondence to the Trust's Chairman, asking that the concerns be investigated appropriately. The Chairman subsequently asked the Trust's interim Chief Executive to commission and oversee a robust, open and transparent investigation into the concerns.
2. In February 2015 the Trust's interim Chief Executive wrote to the Auditor General for Wales (Auditor General) to enquire whether he would be able to carry out an independent review of the concerns. Given the suggestions of impropriety contained within some of the concerns, the Auditor General agreed to undertake a preliminary review in order to determine whether there was any substance in the allegations which warrant an in-depth investigation.
3. On 20 March 2015, a meeting of audit representatives and the Trust's interim Chief Executive took place to determine how the concerns should be investigated. It was agreed that staff from the Wales Audit Office, and KPMG, who deliver the Trust's external audit on behalf of the Auditor General, would undertake an initial phase of review work. As the AM correspondence did not contain much auditable detail, or evidence to support the issues/allegations made, it was agreed that in the first instance audit staff would meet with the AM to determine whether he was able to provide any further information. This meeting took place on 23 April 2015.
4. Whilst the AM was unable to provide much additional information, he facilitated a further meeting on 5 May 2015 with those individuals who originally raised the concerns. These individuals provided sufficient additional information on which to base a number of audit enquiries.
5. The concerns and/or allegations fell broadly into the following areas:
 - fleet management, in particular vehicle acquisition, hire and disposal;
 - equipment procurement, disposal and utilisation arrangements;
 - private ambulance utilisation and control of NHS supplies;
 - overtime arrangements;
 - call classification and response times, resulting in possible manipulation of response time; and
 - patient safety issues, relating to the maintenance of defibrillators, the availability of essential equipment and use of satellite navigation within emergency vehicles.

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6. In order to assess whether any of the matters raised appeared to have substance, requiring in depth investigation, the following actions were taken:
- Key individuals in the Trust with relevant knowledge in the areas of concern were interviewed.
 - The control environment within each area of concern was assessed based on interview evidence, review of system documentation and in some instances the observation of systems in operation. Wherever possible we sought to rely on assurances obtained from existing review work, including work undertaken by KPMG, Internal Audit and other independent reviewers.

Overall Conclusion

7. We found that the majority of concerns raised did not have substance. However, it was evident why members of staff had raised these concerns we therefore have no reason to doubt that the issues were raised in good faith.
8. In respect of the most serious concerns raised, the potential manipulation of response times (concern 15), and patient safety concerns (concerns 16 to 18), we have obtained sufficient assurance to conclude these concerns are without substance.
9. In a small number of instances, we were unable to obtain sufficient assurance from the Trust's Management that the concerns raised were unfounded and we have therefore recommended that the Trust carry out further internal review work in certain areas.
10. It was apparent from the work we carried out that several of the concerns arose because those members of staff who raised the concerns were not aware of changes in operational policy or did not have a full understanding of the Trust's systems and procedures. Whilst we have been told by the Trust's Management that considerable effort has been made to improve communication with staff, the Trust needs to continue to give consideration to the effectiveness of its staff communication strategy and mechanisms.
11. The Trust has been very proactive in encouraging members of staff to raise concerns internally. It is therefore disappointing that some members of staff still feel it necessary to raise their concerns externally. We recognise that it can take a long period of time to change cultural perspectives and therefore we encourage the Trust to continue to promote a spirit of openness and to remind staff of the mechanisms they can use to raise concerns.
12. Given the findings set out in this report, we do not propose to undertake any further in depth investigations into the concerns that were raised. We have, however, made a number of recommendations for the Trust to consider, and respond to. The recommendations are detailed below, with the Trust's management response set out in [Appendix 1](#).

Recommendations

- R1 We recommend that Internal Audit conduct a review to confirm that the identified duplicate payment within the fleet maintenance contract was an isolated example and that the Trust's controls to prevent and detect duplicate payments more generally are robust and operating effectively. As part of this work, there should be an assessment of the arrangements the Trust has in place to ensure invoices are paid in a timely manner, thereby avoiding the need for the company to issue duplicate invoices (see concern 2).
- R2 We recommend that the Trust's Procurement Board review the utilisation and location of the Landrover Discovery and Mercedes bus ambulances to determine whether these vehicles are still required and are being optimally used (see concerns 3 & 4).
- R3 We recommend that the Trust review its vehicle management strategy to ensure that it is robust and aligned with the Trust's overall strategy and future operational requirements. (see concern 6).
- R4 We recommend that Internal Audit conduct a review to test that the arrangements in place to dispose of surplus, obsolete and defective equipment. This further testing should seek to obtain assurance that there is appropriate alignment between the Trust's arrangements for disposal of equipment and identified shortages of equipment elsewhere in the organisation (see concern 7).
- R5 The Trust needs to continue to give consideration to the effectiveness of its staff communication strategy and mechanisms to ensure that operational policy and information regarding the Trust's systems and procedures is effectively disseminated to staff (various concerns, e.g. concerns 8 & 9 and 14).
- R6 We recommend that Internal Audit review the reliability and robustness of controls over access to, and use of NHS supplies by both NHS and private ambulance crews (see concern 11).
- R7 We recommend that the Trust continue to remind staff of the mechanisms through which concerns can be raised internally (see concern 12).
- R8 We recommend that Internal Audit undertake a review to test the effectiveness of the Trust's overtime arrangements (see concern 13).
- R9 We recommend that the Trust issue a clear reminder to staff of the importance of reporting defective equipment, and that a clear audit trail is maintained to demonstrate that reported defects are assessed and rectified in a timely manner (see concerns 15 & 16).

Detailed findings

13. The following sets out each of the specific concerns that were examined, the response of Trust staff to those concerns, and our audit assessment based on our review of the issue. We have sub-divided the concerns into the following areas:
- fleet management, vehicle procurement and disposal and vehicle hire;
 - equipment procurement, disposal and utilisation;
 - private ambulance service utilisation and control of NHS supplies;
 - overtime arrangements;
 - call classification and response times; and
 - patient safety concerns.

Fleet management, vehicle procurement and disposal and vehicle hire

Concern 1 – Tyre Contract

14. The Trust has a contract with a national tyre company for tyre supplies (the contractor). When a vehicle has a puncture or a tyre is damaged, the company will replace all the tyres on the vehicle rather than just the damaged tyre. This does not represent value for money.

Management Response

15. It is probable that vehicles with a single defective/punctured tyre may have had all four tyres replaced. This is due to the Trust's strategy of changing the entire fleet to "cold weather" tyres. Any partly-used tyres which have been changed are returned to stock and used on other vehicles in the fleet. A fuller explanation is set out below.
16. During the last 18 months the Trust has been changing the entire fleet to "cold weather" tyres. On the advice of a tyre manufacturer, the Trust has not mixed cold weather tyres with any other type of tyres. This is to ensure there is consistency in the tyres on each vehicle in the fleet and reduce the overall spend on tyres. If it is necessary to attend a vehicle out of hours, the roadside assist service is provided by the contractor. The contractor takes a full set of one type of tyres to the vehicle. If the set of tyres the contractor has on the rescue vehicle is incompatible with the ones on the vehicle, a full set will be fitted to make the vehicle roadworthy, and meet the recommendation of not mixing tyre types. Any partly used tyres are recycled into the stock that the contractor holds on the Trust's behalf and fitted onto another vehicle at the earliest opportunity. The contractor provides the Trust with a report of all work carried out and where any good tyres which were removed have been used.
17. As soon as all the fleet is on cold weather tyres, the chances of it being necessary to replace "good" tyres are greatly diminished. In the 2014/15 financial year the cost of new tyres was £30,000 lower than the average in previous years as a result of switching to cold weather tyres.

Audit assessment

18. We have seen an example of the Mobile Fitting Job Sheet issued by the contractor which clearly shows which tyres have been replaced. We have also seen three example invoices from the contractor which clearly set out the work performed on a vehicle by vehicle basis, and a breakdown of the costs associated with each call-out. These are reviewed by the Fleet department, analysed and charged to different costs centres and authorised for payment.
19. We understand why some members of the staff, who may not have had an understanding of the reasons for replacing undamaged tyres had value for money concerns. However, we are satisfied with the Trust's response to this concern, and that the necessary management controls are in place in relation to the tyre replacement scheme. We therefore do not consider any further audit action is necessary.

Concern 2 – Fleet Maintenance Contract

20. The South East Wales region of the Trust has a contract with a company for fleet maintenance. The company has sent the Trust duplicate invoices, and invoices for parts which had not been replaced. The Trust is aware of this but no action has been taken.

Management Response

21. The company in question routinely send the Trust copies of their invoices if these have not been paid within the normal payment period. The copy invoices are clearly marked as duplicates and are not entered onto the Trust's system if the original is booked. The Trust's Fleet Department identified one incidence where the company had erroneously invoiced the Trust twice for the same work and a duplicate payment was made by the Trust. Management considered this to be a genuine error on the part of the contractor, and the overpaid amount has been repaid to the Trust. The Trust is intending to purchase a new fleet system in 2015/16 which will automate some of the checks which are currently undertaken manually, e.g. the matching of job numbers to invoices. It is anticipated that this will improve efficiency. A fuller explanation is set out below.
22. There are two issues relevant to the concern raised:
 - Duplicate invoices are routinely sent by the company if the Trust has not paid an original invoice within the normal payment period. These are clearly marked as duplicates and are not entered onto the Trust's system if the original is booked.
 - An invoice for the same job number was paid twice by the Trust in error, as a result of two different people at the company raising invoices.

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- 23.** The company was resource constrained in their finance team and did not follow their normal processes of matching invoices to job numbers. This resulted in an erroneous invoice being sent to the Trust by the company. The issue was identified by the Trust's Fleet Department when it matched job numbers to invoices, but by this time the invoice had been paid twice. The company was notified and the double payment has been refunded by the company. Management are of the view that the erroneous invoice was the result of an isolated example of human error within the company, as opposed to any deliberate attempt to secure a fraudulent duplicate payment.
- 24.** At present the system of matching job orders to invoices at the Trust is a manual one, so manual checks continue to be carried out. The Trust intends to purchase a new system during 2015/16 to improve the governance in this area and ensure that invoices for the same job number are not paid twice. As all invoices must be matched to a job number, which is authorised by the Trust when that job is completed, controls are in place to ensure that payment is only made once for work which has been carried out.

Audit assessment

- 25.** We note that controls have been established within the Trust's Fleet Department to prevent and detect duplicate payments. However, in view of the incident identified above, we recommend that Internal Audit is asked to conduct a review to confirm that the duplicate payment is indeed an isolated example and that the controls to prevent and detect duplicate payments are robust and operating effectively. As part of this work, there should be an assessment of the arrangements the Trust has in place to ensure invoices are paid in a timely manner, thereby avoiding the need for the company to issue duplicate invoices.

Concern 3 – Purchase and utilisation of Landrover Discovery Ambulances

- 26.** The Trust purchased 12 Landrover Discovery ambulances in c2010/11 which initially were unused because the kitting out (stripes, radios, lights etc.) had not been budgeted for. When these vehicles were eventually kitted out, they were only used for approximately nine months due to concerns over running costs, and that they are now parked up and not used.

Management Response

- 27.** The vehicles were kitted out in the following financial year to their purchase. This is not uncommon due to the capital constraints on the Trust. Following a review of maintenance and fuel costs in late 2013, the vehicles were removed from routine daily use to be held at strategic locations for resilience, as required. The vehicles are utilised. In the 2014 calendar year, the combined mileage of the 12 vehicles was 33,073. A monthly record of the vehicle usage is reviewed by the Vehicle Procurement Board on a regular basis to inform the Trust's vehicle replacement strategy. A fuller explanation is set out below:
- 28.** It is not unusual for assets to be purchased in one financial year and the kitting out to be performed in the next, as a result of the constraints on the capital spend at the Trust. The Discoveries were available for use in adverse weather conditions, as well as for day to day operations. Management state that once the vehicles were kitted out in 2011/12 they were used on a daily basis. In late 2013 a review of vehicle maintenance and fuel costs was performed. Following this review it was decided that the vehicles would be removed from routine daily use, and be held at strategic locations for resilience, as required.
- 29.** The vehicles are held at Aberystwyth, Brecon, Newtown (for Welshpool Air Base if necessary), Pembroke Dock, Corwen, Barmouth, Llanwrst, Caernarfon Air Base, Bargoed, Barry, Cefn Coed and Tredegar and are used for off-road incidents and in adverse weather, plus as back-up. A recent report from the Fleet Department shows that each of the vehicles has mileage in excess of 54,000. During the year from 1 January 2014 to 31 December 2014 the total mileage of the 12 vehicles was 33,073. A monthly record of their use on the basis of mileage is reviewed by the Vehicle Procurement Board on a regular basis as part of their decision process on when to replace vehicles.

Audit assessment

- 30.** We are satisfied that the vehicles are being utilised, contrary to the concern communicated to the Auditor General. Nevertheless, the level of vehicle utilisation is low. We therefore recommend that the Trust's Procurement Board review the utilisation of each vehicle to consider whether:
- there is a need to retain all 12 vehicles;
 - the vehicles are appropriately located; and
 - there is a better solution to meeting the needs these vehicles are currently being put to, e.g. use of hire vehicles.
- 31.** We note that the 2013 review of vehicle maintenance and fuel costs resulted in the usage of the Landrover Discovery ambulances being changed. Whilst we agree that running costs is a key consideration in decisions on vehicle utilisation, we would have also expected it to be a key consideration when procuring the vehicles in the first place. We recognise that the procurement of these vehicles occurred several years ago and the Trust has since made progress in developing a more comprehensive and robust strategy to vehicle procurement, management and utilisation.

Concern 4 – Purchase and utilisation of Mercedes buses for Patient Care Services use

- 32.** The Trust purchased several Mercedes buses for Patient Care Services (PCS) use in c2010. These buses have not been used because they are unsuitable for many of the streets within the region.

Management Response

- 33.** The Mercedes bus vehicles were procured in 2007/08 and remain in constant daily use. The vehicles are no larger than an emergency ambulance. The mileage for each of the five vehicles exceeds 85,000 miles. As new processes and rotas are put in place for the non-emergency transfer of patients, the vehicles are being moved to different locations to ensure their use is maximised. At present the vehicles are based at Newport, Bargoed, Bryncethin, Port Talbot and Cefn Coed.

Audit assessment

- 34.** Analysis of the mileages of these vehicles by year indicates that there is significant variation in their usage. In 2014/15, the annual recorded mileages ranged from 851 miles to 16,913 miles. Furthermore, the usage of these vehicles has significantly reduced in recent years. The combined mileage of these vehicles fell from 87,954 in 2011/12 to 41,834 in 2014/15. We recommend that the Trust review its ongoing usage of these vehicles to ensure that all these vehicles are still required and are being optimally utilised.

Concern 5 – Hire of Freelander Land Rover 4 by 4 vehicles

- 35.** The Trust hired several Freelander Land Rover 4 by 4 vehicles approximately two years ago to be used by PCS in adverse weather. These vehicles were unused for the entire hire period of two months as no members of staff were trained in their use.

Management Response

- 36.** The Freelanders were specifically hired for patients who had renal requirements and paid for with money from the Renal Network. This money was “ring fenced” and could not be used for any other purpose. Management state that they were not used to transfer renal patients because there was no inclement weather, not due to lack of training (no additional driver training was required). The standard procurement process was followed and three quotes for the hire of the vehicles were obtained. The final cost of the vehicles hire is expected to be £17,996.

Audit assessment

37. We acknowledge that the Trust hired these vehicles in accordance with the requirements of the Renal Network. Whilst the arrangement raises wider value for money issues for the NHS, we accept that the Trust operated within the parameters within which it was required to operate.

Concern 6 – Disposal of ambulances at Merthyr auctions and subsequent re-commissioning

38. In 2014, the Trust arranged to dispose of 40 ambulances at Merthyr auctions. In preparation for this, the equipment was stripped from all the vehicles and 22 of the ambulances were disposed of. Following discussions with the Welsh Government around resources and financing, it was decided that the vehicles should be retained for use by the Trust. The Trust therefore recovered the unsold vehicles from the auctioneers. It cost £40,000 to return the recovered vehicles to an operational state.

Management Response

39. Management accept that the need to keep the ambulances in service for patient transfers should have been identified earlier. The issue occurred as a result of changing rotas to take account of periods of heavier demand for Urgent Care Services (UCS). UCS vehicles are used to respond to less critical calls, undertake hospital transfers and convey GP reported patients to hospitals. As soon as it became apparent that there was a possible need for the ambulances their sale was stopped, although by this stage 22 of the ambulances had already been sold. De-commissioning of the ambulance equipment was necessary, as the equipment is always re-used in replacement or additional vehicles.
40. At a meeting of the Vehicle Procurement Board held on 25 February 2014 it was minuted “With regard to our current EMS disposal proposal, we need to hold these vehicles for Urgent Care Service (“UCS”) rather than disposing of them”. This was because no additional capital budget had been agreed with the Welsh Government at that stage. At the meeting of the same board on 8 April 2014 it was reported that the disposal of the vehicles had ceased. In order for the Trust to have the option of re-commissioning the vehicles it was necessary for this to happen. In February 2015 it was confirmed to the Quality Delivery Committee that the Welsh Government had provided additional funding for capital expenditure and 17 new EMS vehicles would be purchased, half in 2014/15 and half in 2015/16. As a result of this the ambulances referred to above were not re-commissioned and have now all been disposed of.

Audit assessment

41. The Trust has provided a reasoned explanation for the decision to withdraw the vehicles in question from auction and to re-equip these vehicles as UCS vehicles. The Trust has acknowledged that the need to retain these vehicles should have been identified earlier. We therefore recommend that the Trust review its vehicle management strategy to ensure that it is robust and aligned with the Trust's overall strategy and future operational requirements.

Equipment procurement, disposal and utilisation

Concern 7 – Disposal of equipment through an auction house

42. The Trust has been disposing of serviceable equipment such as orthopaedic stretchers and carry chairs through an auction house, even though there is a shortage of the same equipment within the Trust

Management Response

43. Clinical equipment within the Trust is considered for disposal on the following criteria:
- the equipment is defective and beyond economical repair, taking into account the age of the equipment and net book value if appropriate;
 - the equipment has been replaced by a clinically superior product and is now obsolete; and
 - depending on the equipment, manufacturer's guidance on replacement, MHRA recommendations on replacement or Trust replacement programmes (e.g. Vehicle Replacement Programme).
44. All obsolete and broken (beyond economical repair) equipment is sold off via the NHS Wales approved auctioneers. The items disposed of are recorded, including their condition, and are subsequently removed from the Trust Asset register. Since 2013 £190k of Trust income has been raised via this route. In 2015, obsolete equipment to the value of £120k is to be disposed of via this route.
45. This process is managed by the Clinical Equipment and Procurement Manager (who is responsible to the Head of Clinical Operations), who liaises with fleet and operational management colleagues to identify relevant equipment at station and vehicle level.
46. Examples of equipment disposed of include manual defibrillators which are now obsolete and are being replaced by new state of the art defibrillator/monitors, and metal scoop stretchers which are being replaced by plastic scoop stretchers (enabling use for higher quality immobilisation and enabling patients to be x rayed or CT scanned in situ).
47. A full record of the equipment which has been collected, the sales outcome and the destruction information for any equipment which is beyond saleable condition is maintained.

Audit assessment

- 48.** Whilst Trust Management has provided assurances that there are robust disposal arrangements in place, we consider that further independent testing of these arrangements by Internal Audit would be beneficial. This further testing should seek to obtain assurance that there is appropriate alignment between the Trust's arrangements for disposal of equipment and identified shortages of equipment elsewhere in the organisation.

Concern 8 – Procurement and use of advisory defibrillators

- 49.** Every emergency, rapid response vehicle and outpatient ambulance has a manual automated external defibrillator (AED). It is the Trust's policy for ambulance crews to use manual AEDs and advisory defibrillators cannot be used. Approximately 6-7 months ago, the Trust purchased approximately 200 advisory defibrillators even though these cannot be used under Trust policy.

Management Response

- 50.** The Trust does not have a policy that advisory defibrillators cannot be used. The Trust's policy is consistent with UK policy, i.e. in the event of cardiac arrest, a paramedic must deliver an electric shock. There is no guidance on how this shock should be delivered. Ambulances and response cars have always carried a combined manual cardiac monitor defibrillator, which cost approximately £19k each. Over the last two years the Trust has purchased additional AEDs which are a much smaller hand-held unit similar to those seen in shopping centres and airports. The reasons for carrying two types of defibrillators are:
- to have a back-up in the unlikely situation of a defibrillator failing;
 - to have the ability to treat two patients in cardiac arrest; and
 - to have the ability to carry a defibrillator to more inaccessible places, or where there is water, or where there is no apparent need to take a defibrillator.
- 51.** The combined manual cardiac monitor defibrillators are in the process of being replaced. Ambulance staff are being trained on the use of the new replacement defibrillators both as part of their annual two day update and by the team leaders. It is up to the paramedic to assess which is the best defibrillator to use. This is a matter of personal preference/assessment of the situation rather than there being any rules or guidelines.

Audit assessment

52. Management has provided a reasoned explanation for the purchase of advisory defibrillators and clearly articulated the Trust's policy on the use of defibrillators. In view of the fact that members of the Trust's staff who raised concerns were unaware of the Trust's policy on the use of defibrillators, it would be beneficial for the Trust to raise awareness of its policy and ensure the Trust's policy is communicated to paramedics in training events.

Concern 9 – Purchase of disposable ventilators

53. The Trust has recently purchased a large number of plastic ventilators for approximately £1,000 each to replace the existing mechanical ventilators used in ambulances. We have been told that the ventilators being replaced are of better quality than the replacements and hence the replacements are unnecessary.

Management Response

54. Every emergency ambulance carries a mechanical ventilator which is used to breathe for a patient if they are unable to breathe for themselves. They are heavy and designed for use in the ambulance during transfer to hospital. The Trust has introduced disposable ventilators at a low cost for use when it is not possible to carry the main ventilators to the patient, eg, they are upstairs or in an accessible place or a distance from the ambulance. As soon as the patient gets into the ambulance they can be transferred to the main ventilator for transfer to hospital. The existing ventilators are not being removed from the fleet. The disposable ventilator is an addition to the equipment carried.

Audit assessment

55. Management has provided a reasoned explanation for the purchase of disposable ventilators. It is worrying that members of the Trust's staff who raised the concerns were unaware why the disposable ventilators were purchased, when they are to be used and that they are not intended to replace the existing mechanical ventilators located in vehicles. It would therefore be important for the Trust to ensure that the reasons for purchasing disposable ventilators and their intended use is made absolutely clear to paramedics.

Private Ambulance Service utilisation and control of NHS supplies

Concern 10 – Use of private ambulance providers

- 56.** The Trust has been using several private ambulance providers to provide vehicles and crews where the Trust cannot meet the demand through its regular crews. We have been told that it is common practice for the private providers to supply and be paid for two vehicles and crews to cover shifts which the Trust would cover with a single ambulance and crew.

Management Response

- 57.** Operational emergency ambulance shortfalls are evaluated each Monday morning for the following week-end. Members of staff are invited to apply for overtime shifts and the Monday evaluation meeting takes account of the resource available. After this meeting, any complete shift requiring a double crewed resource is offered to private providers to cover. Recent pressures in meeting performance targets in Aneurin Bevan and Cwm Taf Health Board areas have resulted in the use of more private ambulances since March 2015.

Audit assessment

- 58.** The Trust is able to show that it has considered resourcing needs and sought to cover operational shortfalls before using private ambulances to meet the un-resourced demand. The Trust is aware that the use of private ambulances is highly emotive. It is currently undertaking a recruitment campaign to fill existing staff vacancies, which should reduce the need to use private ambulance crews.

Concern 11 – Use of NHS supplies by private ambulance crews

- 59.** The contracts with private ambulance providers stipulate that the providers supply the vehicles, crews and all medical supplies. Some private ambulance crews have been stocking their vehicles from NHS supplies.

Management Response

- 60.** It is the responsibility of private providers to ensure their vehicle are fully kitted out at the start of an operational shift. However, due to the distance from their home bases local agreements have been put in place for replenishment of low value single use items on a like for like basis. Two reports of over-stocking from the NHS supplies have been raised by local teams and have been addressed with the management of the private providers. Procurement and replenishment of ambulance stations and hospitals has improved since establishing a central warehouse.

Audit assessment

61. Following a request for further information on the over-stocking incidents we were informed by the Trust's Head of Operations that in fact no issues had been *“reported through our normal processes. It may be the case that this has been confused with St Johns vehicles which are able to restock from our supplies, and this has been accounted for in the agreement reached with them.”*
62. In our view, the responses made by Management regarding this matter have been inconsistent and have not directly addressed the concern which was raised. We have not obtained assurance that there are effective controls in place to prevent illegitimate use of NHS supplied by private ambulance crews. We recommend that Management ask Internal Audit to review the reliability and robustness of controls over access to and use of NHS supplies by both NHS and private ambulance crews.

Concern 12 – Due diligence of private ambulance providers

63. One of the private ambulance providers used by the Trust was providing Trust staff with copies of a business card carrying an advertisement for escort-type services on the reverse.

Management Response

64. Management believes it is aware of the individual and provider being referred to. In January 2015 it was decided not to award this provider a contract due to concerns over the provider's professional culture. In February 2015, management discovered that the individual had been employed by another private provider. The Trust terminated its contract with this private provider. In April 2015 it was discovered that the individual had been employed by yet another private provider. This provider was asked to stop using the individual on the Trust's contract.
65. From April 2015 all private providers are required to seek the Trust's approval for individual members of staff to be used on Trust contracts. Providers are asked to give evidence that individuals have Disclosure Barring Service (DBS) disclosures, hold UK ambulance qualifications and are undertaking Continuing Professional Development (CPD). Trust management is of the view that the resource managers take reputational risk very seriously.

Audit assessment

66. Once the Trust became aware of the concern, rigorous action was taken to ensure that the individual in question was not used in the delivery of private ambulance services to the Trust. Since April 2015, the Trust has put in place arrangements to satisfy itself that staff employed by private ambulance providers to deliver Trust contracts are professionally qualified and have been checked by the DBS. In view of the incident in question, we recommend that the Trust continue to remind staff of the mechanisms through which concerns, such as these, can be raised internally.

Overtime arrangements

Concern 13 – PCS Overtime

67. PCS members of staff have been called in to work overtime at weekends at double-time whilst on-duty crews have no work to do.

Management Response

68. It is the Trust's policy that on-duty emergency staff should not be used for patient transfers. The Resources Department centrally reviews the hours worked by paramedics and PCS staff on a daily basis. Overtime requirements are then assessed and those willing to work overtime commit to this in advance.

Audit assessment

69. There is a Trust-wide approach to overtime. The Trust has determined for self-evident reasons that on-duty emergency staff should not be used for patient transfers.
70. Whilst Trust Management has provided assurances regarding the overtime arrangements in place, we consider that testing of these arrangements by Internal Audit would be beneficial.

Call classification and response times

Concern 14 – Call classification

71. It is common for the classification of calls to be changed after ambulances had set off by the South East Wales Control Room, i.e. a call would be classified as green but would be upgraded to red when the ambulance was close enough to meet the response target. This results in the manipulation of response time reporting.

Management Response

72. Each of the Trust's control rooms operate on an all-Wales basis for call taking. Whilst the call is initially allocated to the Control Room in the geographic area in which the call was made, if there are no call-handlers available to take the call, it is re-routed to one of the other control rooms. The initial call classification is automatically coded based on the caller's response to a series of scripted questions. There are occasions when calls are legitimately upgraded and downgraded. This is necessary when the condition of a patient changes, further information is provided by the caller or as a consequence of secondary triage assessment by the Clinical Desk.

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73. When an initial call classification is changed it does not have any impact on the achievement of response targets. This is because the clock starts ticking from the point the chief complaint of the patient is identified. Therefore if a call is upgraded to red, the response time is measured from the identification of the chief complaint to arrival on scene and not from the point of upgrade to arrival at scene.
 74. The Trust runs daily 'Manchester Triage System Clinical Desk' reports which provide statistical data on call classification upgrades and downgrades. The percentage of upgraded calls is small, (less than 1.5 per cent).
 75. The Trust is planning to purchase and implement a new Computer-Aided Dispatch (CAD) system. Once this system is in place, the Trust's control rooms will operate on an all-Wales basis for both call taking and dispatch.

Audit assessment

76. The management response is consistent with the documented Trust dispatch model. As part of our audit enquiries we observed the system in operation within the South East Wales control room and confirmed by observation and interview with Control Room staff that the process is as set out by Management. In addition, we were provided with a system report which showed that from February to July 2015, 419 calls were re-classified of which only 35 met the target response time. We are satisfied that the evidence indicates that response times have not been manipulated through the reclassification of calls.

Concern 15 – Accuracy of recording of response times – satellite navigation issues

77. The satellite navigation system used within emergency vehicles switches off when the destination postcode has been reached and it is automatically recorded that the vehicle is on-scene. However, for some calls, even when the postcode is reached, the vehicle may not be on scene. In consequence, response times are being under-reported. There is a manual override in that staff can manually record that they have arrived at scene by pressing a button on the vehicle touch-screen. However, on several vehicles the touch-screens do not work.

Management Response

78. Management is aware that the current system may occasionally record that a vehicle is on scene, but has not yet arrived. However, the system does not record that the vehicle is on scene unless it is within 200 yards of the location. This may occur when for example an accident occurs on the motorway but the ambulance is travelling in the opposite direction to the accident. When the driver passes the incident, the system automatically records that the vehicle is at scene. However, the driver will need to proceed to the next junction and return to the scene.
79. The automated element of the system is overridden by the crews who are required to manually press the vehicle touch-screen to record that the ambulance is at scene. On

some occasions, crews forget to manually press the screen to record that they have reached the scene, and therefore in those cases the automated data is used.

80. It is also recognised that the touch-screens on some vehicles can be temperamental and develop faults. In addition, the touch-screens do not always respond if members of staff are wearing latex gloves. If touch-screens are defective, staff are expected to report the faults, and all reported faults are addressed.
81. Staff within the Control Room monitor recorded dispatch and arrival times and where there are clear anomalies, they contact the crew for confirmation from their notes of the relevant times.
82. The system used by the Trust is common to other ambulance Trusts and uses the best data available to the service. Whilst it is the case that for a very small number of calls, a vehicle may be recorded as being at scene when it has not yet reached the scene, any potential impact on response times is insignificant.

Audit assessment

83. The Trust's response to the concern is robust. Management acknowledge that for some calls there is a small margin of system error in the recording of when vehicles arrived at scene. This type of system error is common to most if not all of ambulance trusts and its impact is negligible. The dual system of automatic and manual recording of arrival at scene times and the review of anomalies by Control Room staff has provided robust mitigation to the risk of inaccurate reporting of response times. The Management response has been tested by discussion with Control Room staff. However, given the acknowledgment that touch screens on some vehicles can be temperamental, we recommend that the Trust should issue a clear reminder to staff of the importance of reporting defective equipment, and that it also maintains a clear audit trail to demonstrate that reported defects are assessed and rectified in a timely manner.

Patient safety concerns

Concern 16 – Defibrillator batteries

84. The Trust is using batteries for its defibrillators which are significantly older than their recommended life span of 18 months, with some having been purchased as far back as 2007/08. Some of these batteries have failed whilst in operational use, potentially compromising patient safety. As a consequence ambulance crews carry more spare batteries than would normally be the case.

Management Response

- 85.** The Trust uses defibrillators from one manufacturer and conducts its own on-station checks of the serviceability of the defibrillators on a regular basis. The Trust also has a service contract with the manufacturer for the maintenance of all its defibrillators and batteries. The manufacturer services all the defibrillators and checks the batteries every six months and has stipulated that the batteries have an expected two year life. Any defective batteries are removed from service as are any batteries which have gone beyond their two year life. It is possible that some batteries may go beyond the two year life in between the six month service period. However, all vehicles carry a spare battery and if a battery fails whilst in operation staff are required to notify the failure. Management has received no reports of defibrillator batteries failing whilst being operated.

Audit assessment

- 86.** The management response provides a high degree of assurance that patient safety is not being compromised. We recommend that staff be reminded of their duty to report equipment failure.

Concern 17 – Automated satellite navigation

- 87.** The ambulance satellite navigation system automatically switched off when the destination postcode has been reached. In certain geographical areas this can occur when the ambulance is still 10 minutes or more away from the actual address. This can delay arrival at scene as single handed rapid response vehicles may need to stop for the driver to check on the precise location of the address as a result of the satellite navigation system cutting out.

Management Response

- 88.** The satellite navigation system does not cut out when the destination postcode is reached and Management are unaware of any paramedics using their own satellite navigation devices for identifying the destination, nor would their own device be able to identify the destination more accurately than the in-vehicle system.
- 89.** The on-board satellite navigation is automatically fed information on the address of the incident as well as the geographical coordinates. The emergency call is logged by geographic co-ordinates and this information is fed through to emergency vehicles on a real-time basis. The co-ordinates are accurate to within 200 yards of the incident when the call has been made from the scene of the incident.

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- 90.** When the 999 call is not made from the scene of the incident, the Control Room may not be able to provide an accurate destination to the ambulance dispatched to the incident. In these circumstances, the Control Room will attempt to obtain more information on the location whilst the ambulance is on route. This may involve questioning the caller or contacting other emergency services. Any new information obtained is then passed on to the ambulance crew. Where a crew is unable to locate the scene of the accident, they are expected to contact the control room to seek further advice.

Audit assessment

- 91.** Management has provided a robust and reasoned response to the concern. The response has been confirmed by observing processes in operation within the Control Room and by interviewing Control Room staff.

Concern 18 – Use of vacuum mattresses

- 92.** In 2012, the Trust has purchased a quantity of vacuum mattresses in 2012 to assist in the transport of patients with spinal injuries. Their use was deemed to be essential in the care of these patients and enough of these mattresses were purchased to equip all ambulances in the fleet. However, the mattresses purchased were too big to be carried by the ambulances. They consequently have never been used.

Management Response

- 93.** Vacuum mattresses were purchased for all ambulance in the fleet in 2012 (plus spares for hospitals and ambulance service stations); unlike in many of the ambulance trusts in England where they were only purchased when a new ambulance was put into service. The reason for this was that the vacuum mattress is much more effective for a patient with spinal injuries than the traditional flat board. The ambulances in operation needed to be modified to find room for the mattress. Ambulances with 2012 number plates and later have a bespoke cupboard fitted at the manufacture stage. 2010 number plate to early 2012 number plates have been modified to create an internal space for the mattress. These ambulances are regularly serviced, which includes the interior equipping of the vehicles. None of the vacuum mattresses have been reported as missing as part of these service reviews.
- 94.** The '07 and '57 number plate ambulances which are still used by WAST have been modified so the mattress is carried in a cupboard on the outside of the vehicle. Management accept that it is not ideal for vacuum mattresses to be located outside the vehicle and it is possible that in some cases the mattresses may have been removed. However, all of the '07 and '57 plate ambulances will be replaced in the next 12 months and none of these vehicles are used as emergency response vehicles.
- 95.** Managements view is that the allegation is incorrect and all ambulances used as emergency response vehicles carry the mattresses internally.

Audit assessment

96. We are satisfied with the response provided by Management to this concern.

Other concern not reviewed as part of this audit

Concern 19 – Procurement of Renault Ambulances

97. The Trust purchased Renault ambulances approximately eight years ago. The specification of the vehicles meant that the vehicles were overweight and could not carry the necessary equipment or be fully fuelled.

Audit assessment

98. PriceWaterhouseCoopers carried out an independent review and reported fully on this procurement issue in 2006. No further audit action was therefore considered necessary.

Appendix 1

Management response

| Ref | Recommendation | Accepted | Management response | Completion date | Responsible officer |
|-----|---|----------|---|----------------------------|---------------------------------------|
| R1 | We recommend that Internal Audit (IA) conduct a review to confirm that the identified duplicate payment within the fleet maintenance contract was an isolated example and that the Trust's controls to prevent and detect duplicate payments more generally are robust and operating effectively. As part of this work, there should be an assessment of the arrangements the Trust has in place to ensure invoices are paid in a timely manner, thereby avoiding the need for the company to issue duplicate invoices (see concern 2). | Yes | This recommendation has been completed by Internal Audit and a draft report issued. There are recommendations from IA to add additional control to the process. This will be progressed within the Trust. | April 2016 (for IA report) | Patsy Roseblade – Director of Finance |

| Ref | Recommendation | Accepted | Management response | Completion date | Responsible officer |
|-----|--|----------|---|-----------------|---------------------------------------|
| R4 | We recommend that Internal Audit conduct a review to test that the arrangements in place to dispose of surplus, obsolete and defective equipment. This further testing should seek to obtain assurance that there is appropriate alignment between the Trust's arrangements for disposal of equipment and identified shortages of equipment elsewhere in the organisation (see concern 7). | Yes | This has been included within the Internal Audit work plan for 2015/16. The field work is almost complete and the report is expected to be issued April 2016. | April 2016 | Patsy Roseblade – Director of Finance |

| Ref | Recommendation | Accepted | Management response | Completion date | Responsible officer |
|-----|---|----------|---|---|---|
| R5 | The Trust needs to continue to give consideration to the effectiveness of its staff communication strategy and mechanisms to ensure that operational policy and information regarding the Trust's systems and procedures is effectively disseminated to staff (various concerns, e.g. concerns 8 and 9 and 14). | Yes | <p>The Trust has recently appointed an additional member of staff to its Communications Team who will have discrete responsibility for internal communication.</p> <p>This will include a full review of current internal communication mechanisms, a listening exercise with staff and TUs to understand the most effective ways of engaging with staff and, in response, the development of an appropriate suite of communication and engagement tools to support improved internal communication. Local managers will also receive improved guidance and reminders about their local accountabilities in respect of making available pertinent information to staff, particularly as it relates to policy changes, systems and procedures.</p> | March 2017 (with annual review) | <p>Lead Director: Director of Partnerships and Engagement</p> <p>Responsible Officer: Head of Comms</p> |
| R6 | We recommend that Internal Audit (IA) review the reliability and robustness of controls over access to, and use of NHS supplies by both NHS and private ambulance crews (see concern 11). | Yes | This has been included within the 2016/17 IA work plan. | End of Q2 2016/17 (to be confirmed with IA) | Patsy Roseblade – Director of Finance |

| Ref | Recommendation | Accepted | Management response | Completion date | Responsible officer |
|-----|---|----------|---|--|--|
| R7 | We recommend that the Trust continue to remind staff of the mechanisms through which concerns can be raised internally (see concern 12). | Yes | Working closely with the Director of Workforce and OD and trade union partners, periodic reminders will be issued to staff across the Trust's communication channels. This has already begun in 2016. | Periodically on an ongoing basis from January 2016 | Lead Director: Claire Vaughan Director of Workforce and OD |
| R8 | We recommend that Internal Audit (IA) undertake a review to test the effectiveness of the Trust's overtime arrangements (see concern 13). | Yes | This has been included within the 2016/17 IA work plan. | End of Q2 (to be confirmed with IA) | Patsy Roseblade – Director of Finance |
| R9 | We recommend that the Trust issue a clear reminder to staff of the importance of reporting defective equipment, and that a clear audit trail is maintained to demonstrate that reported defects are assessed and rectified in a timely manner (see concerns 15 and 16). | Yes | A clinical equipment bulletin will be issued to remind staff and team leaders of their responsibilities in terms of reporting defective equipment. The Trust holds repair and maintenance contracts for all reusable clinical equipment and regular reports on the activity under these contracts are provided to and reviewed by the Trust Clinical Equipment Manager. | End of April 2016 | Jonathan Wilson – Clinical Equipment and Procurement Manager |

Wales Audit Office
24 Cathedral Road
Cardiff CF11 9LJ

Tel: 029 2032 0500

Fax: 029 2032 0600

Textphone: 029 2032 0660

E-mail: info@audit.wales

Website: www.audit.wales

Swyddfa Archwilio Cymru

24 Heol y Gadeirlan

Caerdydd CF11 9LJ

Ffôn: 029 2032 0500

Ffacs: 029 2032 0600

Ffôn Testun: 029 2032 0660

E-bost: post@archwilio.cymru

Gwefan: www.archwilio.cymru