

PETCT Mobile services

Quality Report

Head Office: Alliance Medical, Icen Centre
Warwick Technology Park, Gallows Hill
Warwick
Warwickshire
CV34 6DA
Tel: 01926 482000
Website: www.alliancemedical.co.uk

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This report describes our judgement of the quality of care at this location. It is based on a combination of what we found when we inspected and a review of all information available to CQC including information given to us from patients, the public and other organisations

Ratings

Overall rating for this location

Good 

Are services safe?

Good 

Are services effective?

Are services caring?

Good 

Are services responsive?

Good 

Are services well-led?

Good 

Mental Health Act responsibilities and Mental Capacity Act and Deprivation of Liberty Safeguards

We include our assessment of the provider's compliance with the Mental Capacity Act and, where relevant, Mental Health Act in our overall inspection of the service.

We do not give a rating for Mental Capacity Act or Mental Health Act, however we do use our findings to determine the overall rating for the service.

Further information about findings in relation to the Mental Capacity Act and Mental Health Act can be found later in this report.

Summary of findings

Letter from the Chief Inspector of Hospitals

PET CT Mobile Services are operated by Alliance Medical Limited. The mobile services are registered to the service provider's Head Office in Warwick.

The service provides diagnostic imaging services, positron emission tomography-computed tomography (PET-CT) to the local community, as agreed via NHS England. We inspected mobile diagnostic imaging services at two locations. Positron emission tomography-computed tomography is a nuclear medicine technique which combines, in a single gantry, a positron emission tomography scanner and an x-ray computed tomography scanner, to acquire sequential images from both devices in the same session, which are combined into a single superposed image. Positron emission tomography (PET) scans are used to produce detailed 3-dimensional images of the inside of the body. The images can clearly show the part of the body being investigated, including any abnormal areas, and can highlight how well certain functions of the body are working. PET scans combined with CT scans produce more detailed images. PET scanners work by detecting the radiation given off by a substance injected into the patient's arm called a radioactive tracer as it collects in different parts of the body. In most PET scans a radioactive tracer called fluorodeoxyglucose (FDG) is used, which is like naturally occurring glucose (a type of sugar) the body treats it in a similar way. By analysing the areas where the radioactive tracer does and doesn't build up, it is possible to work out how well certain body functions are working and identify any abnormalities. For example, a concentration of FDG in the body's tissues can help identify cancerous cells because cancer cells use glucose at a much faster rate than normal cells. The services also used 18-fluoroethylcholine (FEC).

The mobile service operates from eight mobile units. Each vehicle is moved to each mobile site on the required days. The eight mobile units visit 17 different hospital sites across the country each week.

Patient scans are booked and coordinated by a team of booking administrators who are located at various static units and supported by a bookings coordinator and regional seniors who support the mobile service 5 days per week and out of hours via an on-call facility.

The patient scans are reported either by reporters from the local scanning trust, or one of Alliance Medical Limited (AML) supporting teams of registered reporters.

Operating hours for mobile scanning services are typically 7:30am until 7:30pm, however this may vary depending on geographical location and local capacity requirements. AML currently offers mobile scanning services six days per week Monday to Saturday inclusive.

We inspected this service using our comprehensive inspection methodology. We carried out two unannounced inspections to two different locations on 11 December 2018 (Wolverhampton) and 19 December 2018 (Guildford).

To get to the heart of patients' experiences of care and treatment, we ask the same five questions of all services: are they safe, effective, caring, responsive to people's needs, and well-led? Where we have a legal duty to do so we rate services' performance against each key question as outstanding, good, requires improvement or inadequate.

Throughout the inspection, we took account of what people told us and how the provider understood and complied with the Mental Capacity Act 2005.

The only service provided at this location was diagnostic imaging.

Services we rate

We previously did not have the authority to rate this service. We rated it as good overall.

We found the following areas of good practice:

Summary of findings

- There were systems in place to keep people safe from avoidable harm and to provide the right care and treatment.
- Staff provided a focused and individual approach to patient care.
- Staff were caring, kind and engaged appropriately with patients.
- Staff told us they received feedback from incident reporting processes. We saw evidence of change to practice from incident investigation.
- The service provided care and treatment based on national guidance and evidence of its effectiveness.
- Managers monitored the effectiveness of care and treatment and used the findings to improve them.
- The service made sure staff were competent for their roles.
- The service planned and provided services in a way that met the needs of local people.
- The service took account of patients' individual needs.
- The service treated concerns and complaints seriously.
- Managers at all levels in the service had the right skills and abilities to run a service providing high-quality sustainable care.
- The service had systems to identify risks, plan to eliminate or reduce them, and cope with both the expected and unexpected.

However, we found areas of practice that the service needed to improve:

- When administering fluorodeoxyglucose (FDG) or 18-fluoroethylcholine (FEC) to patients, the service should review the opportunity for a second clinician to check the dosage prior to administering. While there were checks when the radiopharmaceutical was dispensed, drawn up and level of radioactivity measured, a final four or five-way check immediately prior to injection of patient versus, demographics, versus intended exam, versus radioactive medicinal products (RMP) identity versus RMP activity, would be a useful 'fail-safe'.


Following this inspection, we told the provider that it should make improvements, even though a regulation had not been breached, to help the service improve. Details are at the end of the report.

Amanda Stanford

Deputy Chief Inspector of Hospitals (Central)

Summary of findings

Our judgements about each of the main services

Service	Rating	Summary of each main service
Diagnostic imaging	Good 	The provision of PET-CT scanning services, which is classified under the diagnostic imaging core service was the only core service provided at this service. We rated this core service as good overall.

Summary of findings

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Good 

PETCT Mobile services

Services we looked at

Diagnostic imaging

Summary of this inspection

Background to PETCT Mobile services

PET CT Mobile Services is operated by Alliance Medical Limited. The provider registered with the CQC in July 2013. The service provides diagnostic screening tests using PETCT screening equipment.

The service provides PET-CT scanning services for patients aged 18 years and above.

The service has had a registered manager in post since registering with the CQC in July 2013.

Our inspection team

The team comprised a CQC lead inspector who had completed the single speciality diagnostic imaging training and a specialist advisor. The inspection team was overseen by Phil Terry, Inspection Manager and Bernadette Hanney, Head of Hospital Inspection.

Information about PETCT Mobile services

- The location was registered to provide the following regulated activities:
 - Diagnostic and screening procedures.
- During the inspection, we visited two mobile site locations at acute NHS Hospitals. We spoke with five staff including radiographers, technologists, clinical assistants and senior managers. We observed five PET-CT scans and engaged with patients and relatives during these procedures. We reviewed five patient records.
- There were no special reviews or investigations of the service ongoing by the CQC at any time during the 12 months before this inspection.
- The service was registered with the CQC in July 2013 and this was the first inspection since registration.

Activity (October 2017 to September 2018)

- There were 15,138 positron emission tomography-computed tomography (PET-CT) scans performed at the service in the last 12 months. NHS England was the main commissioner, although 1,040 scans were commissioned by The Welsh Health Board.
- There were 23 whole time equivalent (WTE) radiographers/technologist, 12.8 WTE clinical assistants and 6.5 bookings administrators all staff

were employed on permanent contracts. At the time of inspection there were 14 vacancies, nine WTE radiographers/technologist, three WTE clinical assistants and two bookings administrator vacancies.

- Controlled medicines were not used and therefore they did not have an accountable officer for controlled drugs (CDs).

Track record on safety, from October 2017 to September 2018.

- There were no never events reported.
- No serious incidents.
- No incidents occurred requiring candour notifications.

Services accredited by a national body:

- The service currently had three accreditations by national bodies:

Name of Accredited Body	Date of Accreditation	Date of Renewal
ISAS	July 2018	July 2021
ISO27001	June 2018	June 2021
IIP	March 2017	March 2020

Services provided under service level agreement:

- Clinical and or non-clinical waste removal.
- Laboratory services.

Summary of this inspection

- Interpreting services.
- Maintenance of medical equipment.

Detailed findings from this inspection

Overview of ratings





Our ratings for this location are:

	Safe	Effective	Caring	Responsive	Well-led	Overall
Diagnostic imaging	Good	N/A	Good	Good	Good	Good
Overall	Good	N/A	Good	Good	Good	Good

Notes

We do not rate effective.

Diagnostic imaging

Safe	Good 
Effective	
Caring	Good 
Responsive	Good 
Well-led	Good 

Are diagnostic imaging services safe?

Good 

We rated this service as **Good**.

Mandatory training

- The service provided mandatory training in key skills to all staff and made sure staff completed it.
- Most staff received effective mandatory training in the safety systems, processes and practices. At the time of inspection, all staff were compliant with their mandatory training. This met the compliance standard of 90% expected by the service. The target for information governance was set at 95% for the last twelve months to comply with the information governance tool kit. Staff compliance for this location was 98.8% which met the target.
- Most training was delivered as an e-learning module. However, staff attended face to face training for immediate life support. Staff completed their e-learning in their own time. Face to face sessions was in work time.
- There was a system in place to ensure there was always staff members on duty with the correct level of resuscitation training. All staff supporting patients as part of the clinical pathway were required to complete immediate life support (ILS), this included paediatric basic life support (BLS). Staff told us they were required to attend this training on their day off but received payment for these extra hours. The training compliance for ILS was 90% at the time of the inspection. We saw evidence of staff whose training was outstanding had a session booked.

- A contemporaneous training record was available for all staff and was reviewed by their line manager. Staff were emailed to prompt them to book to update their training, three months and one month prior to their training expiring.
- Mandatory training subjects included:
 - Complaints handling.
 - Conflict resolution.
 - Equality and diversity.
 - Fire safety at work.
 - Health and safety awareness.
 - Infection control.
 - Information governance.
 - Managing violence and aggression.
 - Manual handling objects.
 - Medicines management in imaging.
 - Moving and positioning patients.
- The mandatory equality and diversity training provided staff awareness of the potential needs of patients with any of the following needs: mental health, learning disabilities, autism and dementia. Most (86.5%) staff had completed this training.
- All staff working at the service were expected to complete the local induction process that covered local requirements such as knowledge of the local rules, operational site file, fire evacuation plan, local staff facilities and access codes to relevant areas.
- We were assured staff working with radiation had appropriate training in the regulations, radiation risks, and use of radiation. Staff were able to provide evidence of training and were aware of the Ionising Radiation Regulations 2017 (IRR17) and the Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R17) and were able to direct us to the IRR regulations.

Safeguarding

Diagnostic imaging

- Staff understood how to protect patients from abuse and the service worked well with other agencies to do so. Staff had training on how to recognise and report abuse and they knew how to apply it.
- There were systems, processes and practices essential to keep patients safe identified, put in place and communicated to staff.
- There were arrangements in place to safeguard adults and children from abuse that reflected relevant legislation and local requirements. Staff were trained to recognise adults at risk and were supported with an effective safeguarding adults' policy in place that reflected relevant legislation and local requirements. Staff we spoke with demonstrated they understood their responsibilities and adhered to safeguarding policies and procedures. Staff were aware of their responsibilities surrounding female genital mutilation (FGM).
- Contact numbers, relevant to the location, for local adult and child safeguarding referrals were displayed in the control room.
- There were processes in place to ensure the right person received the right imaging procedure or radiological scan at the right time. The service checked six points of identification and used the society of radiographers pause and check guidance.
- There was a system in place to ensure there were always staff members on duty with the correct level of safeguarding training. At the time of the inspection, all staff had been trained in safeguarding children level one and two. The unit did not treat patients who were under the age of 18. This met intercollegiate guidance 'Safeguarding Children and Young People: Roles and competencies for Health Care Staff' (March 2014). All staff had been trained in safeguarding adults level one and two.
- There were reliable systems in place to prevent and protect patients from a healthcare-associated infection. There were safety systems, processes and practices in place and these were monitored and improved when required.
- There was the infection control lead in place for all services.
- There had been no incidences of a healthcare acquired infection from October 2017 to September 2018.
- The unit team cleaned the scanning rooms at the end of each day. Cleaning was recorded on a daily check sheet which was reviewed by the unit manager each week. We observed appropriate cleaning procedures in place for all PET-CT equipment, following use.
- The service was subject to regular, infection, prevention control (IPC) monitoring requirements in accordance with policy and procedure. Four of the eight, unit audits, had not been completed at the time of this report. Four of the units assessed, achieved a mean score of 88.5%. The annual IPC audit 2018-19 benchmark was 90%. Two units had met the target and two were just below in the August 2018 audit. Areas of development were documented in the individual scanner action plans which were monitored by the IPC lead and the regional seniors.
- The service met National Institute for Health and Care Excellence (NICE) QS61 statement 3: People receive healthcare from healthcare workers who decontaminate their hands immediately before and after every episode of direct contact or care. Hand hygiene audits were undertaken to measure compliance with the World Health Organisation's (WHO) 'Five Moments for Hand Hygiene.' These guidelines are for all staff working in healthcare environments and define the key moments when staff should be performing hand hygiene to reduce risk of cross contamination between patients. Hand hygiene audits had been completed for all clinical staff every month during the reporting period, with the mean score being 98%, area of development noted relating to 'Bare Below Elbows'. The service manager had addressed this with staff. Mobile Scanners did not have water, hand wipes and hand gel were in use. Procurement of mobile wash hand basins was in progress, taking into consideration space and radiation exposure issues. Hand hygiene results were communicated to staff at team meetings and through email. We observed staff to be compliant with best practice regarding hand hygiene, and staff were noted to

Cleanliness, infection control and hygiene

- The service controlled infection risk well. Staff kept themselves, equipment and the premises clean. They used control measures to prevent the spread of infection.
- Standards of cleanliness and hygiene were maintained. The service had infection prevention and control (IPC) policies and procedures in place which provided staff with guidance on appropriate IPC practice, for example, communicable diseases and isolation.

Diagnostic imaging

be bare below the elbow. As there was no access to hand washing facilities on the vehicles, hand sanitiser gels were available for both staff and patients to use in reception and in the control room. Staff used hand sanitiser gels between patients and went off the vehicle to wash their hands in acute hospital facilities on regular occasions. Patients told us staff used hand sanitiser gels prior to attending to them. Information charts about hand hygiene were displayed on the vehicles.

- Sharps disposal bins (secure boxes for disposing of used needles) were located as appropriate to ensure the safe disposal of sharps, for example needles. They were all clean and not overfilled. Labels were correctly completed to inform staff when the sharps disposal bin had been opened.
- Staff were trained in cannulation and explained to us the need to monitor cannula sites. They also told us about the process, for removing the cannula and we observed them disposing of them correctly in a contaminated sharps container.
- The 'Insertion of Peripheral Vascular Device (PVD)' audit had been completed for all clinical staff every month during the reporting period 12 months October 2017 to September 2018, the mean score was 100%.
- The patient referral pathway did not restrict referral of infectious patients. Where infectious patients were referred they were managed in compliance with policy for example, deep cleaning was carried after the scan, Scans were reported through the incident reporting policy to allow trend analysis. No trends had been identified and no areas of concern had been noted in the reporting period.
- Most staff (89%) were compliant with the on-line annual IPC training module. This was just below the providers target of 90%.
- An annual deep clean was carried out by an external service through a corporate contract. We saw evidence to assure us this had been completed.

Environment and equipment

- The service had suitable mobile premises and equipment and looked after them well.
- The design, maintenance and use of facilities and premises prevented patients from avoidable harm. The location of the mobile units varied depending on which hospital site it was attending.
- Patients had access to waiting room and toilet facilities. We were told a support unit attended on site to provide

a reception and patient toilet for radioactive fluid waste disposal for the sites where the scanner was not close to the hospital building. Both sites visited were located close to the nuclear imaging unit at the acute trust.

Patients were able to access the hospital waiting room and toilet facilities. It was noticed at the Wolverhampton site, the warning signage, a clear radioactive warning sign was missing from the toilet. Staff were aware and had made a temporary sign. A replacement sign had been ordered. The door to the toilet was locked to prevent unauthorised access.

- Each mobile scanning unit had stairs and a patient lift for patients who used wheelchairs or were unable to climb stairs. The lift was also used for emergency evacuation of a patient who required urgent transfer to emergency services.
- The entrance points for both services visited was through the acute hospital nuclear imaging department reception, which was always staffed.
- There was either one or two patient uptake rooms depending on the model of the unit and each uptake room housed a patient injection chair. Patient uptake rooms were the areas patients were injected with the radioactive tracer which was required for the ensuing imaging process. They rested in this room for an hour until the examination started.
- The scanning room contained a PET-CT scanner, cupboards to hold the patient blankets and consumables. To the rear of the unit was an information technology room for IT equipment and storage.
- Parking was available on site at the acute trusts but at a cost to the patients.
- Maintenance and use of equipment protected patients from avoidable harm. All equipment conformed to the relevant safety standards and had been regularly serviced. Electrical equipment had been appropriately tested. We looked at five items of equipment, on each site. They all had a sticker indicating when they had been last serviced and when the next service was due. Equipment we looked at had an up to date service record which provided information on when an item was due to be serviced.
- A control/observation area allowed visibility of all patients during the scan and close circuit televisions allowed staff to observe and monitor patients in the treatment rooms following administration of FDG.
- There was sufficient space around the scanner for staff to move and for scans to be carried out safely. Patients

Diagnostic imaging

had access to an emergency call buzzer, ear plugs and defenders during scanning, music could be played. A microphone allowed contact between the radiographer and the patient during the scan. However, at the time of inspection, the radio at the Guildford facility was broken so patients were unable to listen to music.

- Arrangements for managing waste and clinical specimens, protected patients from avoidable harm. This included classification, segregation, storage, labelling, handling and, where appropriate, treatment and disposal of waste. Staff used the correct system to handle and sort different types of waste and these were labelled appropriately.
- The systems, processes and practices that were essential to prevent patients from avoidable harm were identified, put in place and communicated to staff. Implementation of safety systems, processes and practices were monitored and improved when required.
- Resuscitation equipment was readily available and easily accessible. There was a defibrillator and an emergency resuscitation grab bag in the scanning room. Daily and monthly checks carried out, demonstrated the equipment was safe and fit for use. There were procedures in place for removal of a collapsed patient and we reviewed evidence of evacuation practices which were performed twice yearly.
- Arrangements were in place to ensure that the premises had arrangements in place to restrict access into the control the area where there was ionising radiation. We saw radiation warning signs were correctly located outside the clinical diagnostic imaging area. Signs on the door explained safety rules. The door was locked when the PET CT was in use. Chemical products deemed as hazardous to health were in locked cupboards or rooms that were only accessible to authorised staff.
- Call bells were available within the scanning room which patients could press if they wanted the scan to stop. We noted at the Guildford site, one of the call bell cords was worn and wires were exposed. It was raised at the time of inspection, staff checked it was working and patients would not be at risk from the loose wires. Following inspection we were provided evidence the call bell cord had been replaced.
- There was twenty-four-hour, seven-day picture archiving and communication system (PACS) support, there were backup arrangements in the event of an IT failure.

Assessing and responding to patient risk

- Staff completed and updated risk assessments for each patient. They kept clear records and asked for support when necessary.
- There were comprehensive risk assessments carried out for patients and risk management plans developed in line with national guidance. For example, we saw evidence of a patient safety questionnaire being completed prior to any scan. Risks were managed positively and updated appropriately where a change in the approach was required for example managing patient who was very anxious about the procedure or had a needle phobia.
- Five patients had required urgent transfer for emergency care between October 2017 and September 2018. Any patient that became unwell and required transfer, was cared for by staff trained to ILS level. The service did not follow up patients that were urgently transferred as urgent care provider did not share outcome information.
- Staff used the Society of Radiographers (SoR) “Paused and Checked” system to reduce the risk of referrer error. Pause and Check consisted of the six-point demographic checks to correctly identify the patient, as well as checking with the patient the site/side to be imaged, the existence of previous imaging and for the operator to ensure that the correct imaging modality was used.
- The potential risks of intravascular administration of FDG or (FEC) were assessed against the potential benefits.
- Clinical staff told us they felt confident to identify and respond appropriately to changing risks to patients who use services, including deteriorating health and wellbeing or medical emergencies. All clinical staff had received immediate life support training.
- There were clear pathways and processes for staff to assess patients using services who were clinically unwell and needed hospital admission. For example, Alliance Medical Ltd (AML) Management of Medical Emergencies Policy and Procedure were available to guide staff in referring patients to an emergency department.
- Radiation risks to patients were managed in line with guidance from the International Atomic Energy Agency

Diagnostic imaging

(IAEA) The Committee on Medical Aspects of Radiation in the Environment (COMARE 16th report): Review of radiation dose issues from the use of CT' (published 14 August 2014).

- The service ensured that women (including patients and staff) who were or may be pregnant always informed a member of staff before they were exposed to any radiation in accordance with IR(ME)R. We saw evidence if the possibility of pregnancy could not be excluded, the patient was asked whether her menstrual period was overdue. Low dose procedures could continue to be undertaken, provided that the women's period was not overdue, which met national guidance. Information was sent out to the patient at the time of booking the appointment and there were notices up in the reception, waiting area and corridors.
- An audit of radiation protection arrangements was carried out in December 2017. This audit reviewed departmental procedures, protocols and practices against the legislative requirements and associated guidance. The radiation employer for the service was Alliance Medical Limited (AML). The Radiation Protection Adviser (RPA) and Medical Physics Expert (MPE) were appointed under the national contract by AML. The service was operated and staffed by AML, including the regional senior who was appointed as the Radiation Protection Supervisor (RPS). The audit identified area local rules were up to date and on display, at the time of inspection we saw a copy of the local rules were on display in the two vehicles visited.
- The service had named staff fulfilling the essential roles of radiation protection advisor, medical physics expert, radiation protection supervisor, senior radiologist and infection control lead. The service had an appointed radiation protection supervisor (RPS). Staff said the radiation protection advisor (RPA) and the medical physics expert (MPE) were readily accessible online or through the telephone for providing radiation advice.
- There were local rules (IRR17) and employer's procedures in place (IR(ME)R) which protected staff and patients from ionising radiation. These had been updated since the introduction of the 2017 regulations. These were accessible by staff on the intranet and a brief guide was displayed in the control room. However, during inspection of the Wolverhampton vehicle, a

paper copy containing the 1999 regulations was found in the local rule folder. This was raised with the team and regional senior manager and it was removed and replaced with the up to date version.

Staffing

- The service had enough staff with the right qualifications, skills, training and experience to keep people safe from avoidable harm and to provide the right care and treatment.
- There were sufficient numbers of staff with the necessary skills, experience and qualifications to meet patients' needs. An AML staffing requirement to support a safe scanning pathway standard of practice (SOP) was in place, this enabled the unit to effectively maintain safe staffing levels and ensured there were sufficient numbers of suitably qualified, skilled staff to carry out daily tasks. The policy and procedure outlined how the headcount (actual number of staff on duty) and full time equivalent (FTE) numbers were to be calculated and managed at unit level. To achieve this, the minimal amount of staff required locally for a full scanning day was two technologists/radiographers and one clinical assistant, having minimum of two staff qualified in the management of medical emergencies and recognition of the deteriorating patient, to provide a safe service to patients. All staff had completed relevant clinical competency assessments in relation to their role. To support patient safety, all members of staff had been ILS trained, undertaking courses recognised by the Resuscitation Council UK (RCUK).
- Staffing for the mobile services comprised four regional seniors, 23 whole time equivalent (WTE) radiographers/technologist, 12.8 WTE clinical assistants and six point five, bookings administrators all staff were employed on permanent contracts. At the time of inspection there were 14 vacancies, nine WTE radiographers/technologist, three WTE clinical assistants and two bookings administrator vacancies.
- The staffing policy ensured the service operated safely and effectively, with the appropriate number of staff and correct skill mix levels required to facilitate safe care.
- The service had 'lone working' policy and risk assessment process.
- No appointments had been cancelled because of staffing issues from October 2017 to September 2018.

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- From October 2017 to September 2018, the average sickness rate for the service was reported as 8.9%. 5.9% for radiographers and 3% for clinical assistants.
- The service had used 50 bank staff shifts to cover times of staff shortage between July 2018 and September 2018. 28 of these were covering clinical assistant roles and 22 were covering clinical technologist / radiographer posts. Bank or agency staff were required, prior to undertaking any shifts, to complete a period of induction and have proof of completion of mandatory training relevant to the position they were required to fill, and previous equipment experience to establish suitability.
- Each service was managed by an experienced operational manager, supported by regional management and central support functions, to maintain 24-hour accountability for safe and appropriate staffing levels.

Medical staffing

- The service did not employ any medical staff. All reporting consultants worked for local NHS trusts.

Records

- Staff kept detailed electronic records of patients' care and treatment. Records were clear, up-to-date and easily available to all staff providing care.
- Patients' individual care records were written and managed according to best practice.
- We reviewed eight patient records. Records were accurate, complete, legible, up to date and stored securely. Records were electronic and available for access by staff. Paper records such as paper referrals were shredded as per policy once the information was uploaded.
- The radiology information system (RIS) and picture archiving and communication system (PACS) used by the service was secure and password protected. Each staff member had their own personally identifiable password.
- Patient and clinical information was recorded on the provider's electronic records system. This system was not integrated with the commissioner's (NHS England) data management system, however there was a secure system in place to ensure necessary information was shared such as reports and images from the PET-CT

Scan. The report was also shared with the commissioner via secure NHS.net account for administration purposes. This process was managed by the provider's image transfer team and case management.

- The quality of images was peer reviewed locally by the acute trust and quality assured on a corporate level. Any deficiencies in images were highlighted to the member of staff for their learning. However, this was very rare, and the services re-scanning rate was negligible.

Medicines

- The service generally followed best practice when giving, recording and storing medicines. Arrangements were in place for managing fluorodeoxyglucose (FDG) and fluoroethylcholine (FEC) that protected patients from avoidable harm. This included obtaining, prescribing, recording, handling, storage and security, dispensing and disposal.
- We were not always assured there were sufficient checks to ensure patients received the correct dosage of the radioactive drug, or tracer. A PET scan uses a small amount of a radioactive drug, or tracer, to show differences between healthy tissue and diseased tissue. The most commonly used tracer is called fluorodeoxyglucose (FDG), so the test is sometimes called an FDG-PET scan. Before the PET scan, a small amount of FDG is injected into the patient. There were processes in place to ensure the right radiopharmaceutical was injected. There were checks when the radiopharmaceutical was dispensed, drawn up and level of radioactivity measured. However, at the Guildford site, a lone technologist was administering fluorodeoxyglucose (FDG) or 18-fluoroethylcholine (FEC) to patients. There was no opportunity for a second clinician to check the dosage prior to administration. While there were checks when the radiopharmaceutical was dispensed, drawn up and level of radioactivity measured, which was in line with their administration policy, a final four or five-way check immediately prior to injection of patient verses, demographics, verses intended exam, verses radioactive medicinal products (RMP) identity verses RMP activity, would be a useful 'fail-safe'. We raised this with senior staff during the inspection.
- Medicines were stored securely within a designated room and were stored at the correct temperatures, in line with the manufacturers' recommendations, to ensure they would be fit for use.

Diagnostic imaging

- Staff were trained on the safe administration of intravenous FDG and FEC. We reviewed staff competency files and saw all staff had received this training. We observed five patients receiving intravenous FDG during our inspection, their allergies were documented and checked on arrival in the unit.
- The service did not use any controlled medicines for any of their procedures and therefore did not have a controlled medicines policy in place.
- The service did not use Patient Group Directions (PGDs). A Patient Group Direction (PGD) is defined by the National Prescribing Centre (2004) as 'a written instruction for the sale, supply and or administration of named medicines in an identified clinical situation. The Society of Radiographers (SoR) recommended "Paused and Checked" system was used to check medications prior to administration.
- Emergency medicines were available in the event of an anaphylactic reaction. These were in date.
- The registered manager was the service lead for the safe and secure handling of medicines.
- Patients were given patient information post scan which documented which medications they had been given. This directed patients to seek advice from their GP or accident and emergency department if feeling unwell after leaving the unit and explained they should show the information regarding what they had received.
- The pharmacy team and the referring consultant at the local acute trust was available for assistance and advice locally if required.
- The service had a consultant pharmacist who issued guidance and support at a corporate level and worked collaboratively with the clinical quality team on all issues related to medicines' management.
- Medication and disposal was provided by an external company on a contract.
- The service ensured that the Medicines (Administration of Radioactive Substances) Regulations 1978 (MARS), were taken account of. PET scanning was performed with access available by telephone to either an administration of radioactive substances committee (ARSAC) license holder or their delegates. Groups of medical staff for example, the acute hospital consultant available for clinical advice were identified in the site file.
- The service managed patient safety incidents well. Staff recognised incidents and reported them appropriately. Managers investigated incidents and shared lessons learned with the whole team and the wider service. When things went wrong, staff apologised and gave patients honest information and suitable support.
- There was an effective system in place for reporting incidents. Staff understood their responsibilities to raise concerns, to record safety incidents, concerns and near misses.
- There were no never events reported for the service from September 2017 to October 2018. Never events are serious incidents that are entirely preventable as guidance, or safety recommendations providing strong systemic protective barriers, are available at a national level, and should have been implemented by all healthcare providers.
- There were no serious incidents reported for the service from September 2017 to October 2018. Serious incidents are events in health care where there is potential for learning or the consequences are so significant that they warrant using additional resources to mount a comprehensive response.
- The service had recorded 253 incidents from October 2017 to September 2018. Incidents were categorised in to subjects and levels of risk. Subjects included:
 - clinical audit for example clinical audit outcome level 2 discrepancy identified.
 - clinical such as extravasation and medication issues.
 - health and safety for example a rat infestation, vandalism and a fall.
 - information governance and security such as incorrect entering of patient FDG dose in records or loss or theft of media or computer equipment.
 - infection control for example a needle stick injury.
 - operational such as loss of power, patient was injected but unable to be scanned.
 - radiation protection for example, a scan abandoned and staff exposure to radiation.
 - radiology reporting such as a delay in reporting and missing images due to power outage.
 - safeguarding for example a patient disclosure and no escort provided by acute trust.
- There had been one high risk, 139 moderate risks, 98 low risk and 15 very low risk. The high risk related to emergency call bells not being heard by staff in the control room.

Incidents

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- We reviewed reported incidents. All incidents were recorded, reviewed and investigated with trends identified and actioned at a national and regional level. All serious incidents were reported within 24 hours and a root cause analysis (RCA) investigation undertaken. RCA investigation reports were reviewed at the relevant sub-committees who were responsible for making sure that appropriate remedial action and shared learning had taken place. During 2017, a new pathway for 'escalated events' was introduced to track incidents which the organisation considered require a more in-depth level of investigation to support prevention.
 - Information and learning from incidents was shared in the form of a monthly newsletter 'risky business' Staff were updated about recent incidents and learning points were shared.
 - Senior staff were aware of the requirements for reporting serious incidents to the CQC using the statutory notification route if this met the criteria, under Regulation 18 of the Care Quality Commission (Registration) Regulations 2009.
 - From March 2015, all independent healthcare providers were required to comply with the Duty of Candour Regulation 20 of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014. The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of 'certain notifiable safety incidents' and provide reasonable support to that person. Staff were aware of the duty of candour regulation (to be open and honest) ensuring patients received a timely apology when there had been a defined notifiable safety incident. The service had a duty of candour policy in place. The policy defined when the principles of duty of candour should be followed.
- Safety Thermometer (or equivalent)**
- The service did not complete the safety thermometer as this was not applicable to the service they provided their patients.

Are diagnostic imaging services effective?

We do not rate effective.

Evidence-based care and treatment

- The service provided care and treatment based on national guidance and evidence of its effectiveness. Managers checked to make sure staff followed guidance.
- Relevant and current evidence-based guidance, standards, best practice and legislation was used to identify and develop how services, care and treatment were delivered.
- Patients had their needs assessed and their care and treatment was planned and delivered in line with evidence-based guidance, standards and best practice. Relevant and current evidence-based guidance, standards, best practice and legislation identified and were used to develop how services, care and treatment were delivered for example, The Royal College of Radiologists Evidence-based indications for the use of 'PET-CT in the United Kingdom' (2016).
- Policies procedures and staff competence ensured, in relation to diagnostic procedures involving nuclear medicines, the practitioner noted the diagnostic reference level for each adult investigation. Activity for each exposure was optimised so it was the lowest practicable dose to the patient.
- All PET-CT reporters were included in the national programme audit scheme. This was a randomised 10% surveillance audit undertaken by auditors independent to the reporting clinicians. New reporters, were subject to 100% audit of their first 50 cases. If there were no concerns with the audit results, the reporter transitioned to the 10% audit. If there were areas for concern, a further 50 cases were subject to 100% audit. In addition to this there were conversations with both the administration of radioactive substances committee (ARSAC) license holder who was responsible for their work and the new reporter themselves to understand how the new reported could be supported. In addition to auditing the content of the report, there was an image quality score made, which was fed back to the managers of the scanning teams. The results were held centrally, with feedback provided throughout the year to reporters to allow for reflection of practice.

Nutrition and hydration

- There were no nutrition services provided by the mobile unit for patients that attended for PET-CT scans.

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However, patients had access to bottled water in the intake/treatment rooms. There were tea and coffee facilities in the Guildford waiting room for patients after their scan.

Pain relief

- Patients were asked by staff if they were comfortable during their appointment, however no formal pain level monitoring was undertaken as procedures undertaken were pain free.

Patient outcomes

- Managers monitored the effectiveness of care and treatment and used the findings to improve them. They compared local results with those of other Alliance Medical Limited (AML) services to learn from them.
- Information about the outcomes of patient's care and treatment was routinely collected and monitored. The service undertook regular clinical audits internally within the organisation. They took appropriate action to monitor and review the quality of the service and to effectively plan for the implementation of changes and improvements required.
- All PET CT reporters were included in the National Programme Audit scheme. A randomised 10% surveillance audit was undertaken by independent auditors. This was a centrally coordinated audit process. The results were held centrally, with feedback provided throughout the year to reporters to allow for reflection of practice.
- The time between when a referral to the service for a scan was received and that scan being booked was recorded. From May 2018 to August 2018, 100% of patients were seen within two days.
- The service manager audited and compared key elements of the referral and scanning pathway and these were benchmarked with other AML locations.
- Audits of the quality of the images were carried out by the acute trust. The services re-scanning rate was negligible
- The consultants from the acute trust were responsible for the reporting and analysis of images. This was monitored by the acute trust and the clinical commissioning group.
- There was an audit schedule in place. The audits aimed to assist in monitoring the service and drive improvement. It involved all staff ensuring they had

ownership of things that had gone well and that needed to be improved. Audits included incidents, complaints, hand hygiene, infection prevention and control and patient satisfaction.

- A monthly report was submitted to the commissioners, this provided the commissioners with information on activity and any issues impacting on service provision such, as staffing, equipment, operational issues and improvements.

Competent staff

- The service made sure staff were competent for their roles. Managers appraised most staff's work performance and held informal supervision meetings with them to provide support and monitor the effectiveness of the service.
- Staff had the right qualifications, skills, knowledge and experience to do their job when they started their employment, took on new responsibilities and on a continual basis. The service operated a comprehensive mandatory and statutory training programme which ensured relevant knowledge and competence was maintained and updated throughout the lifespan of employment with the organisation.
- Most staff had regular informal meetings with their manager and many had a performance appraisal annually to set goals to review them. At the time of inspection, all unit managers and booking coordinators had received an appraisal, however, 73% PET radiographers/technologists and 82% clinical assistants had received appraisals in the last twelve months.
- All eligible staff had had their professional registration checked in the last 12 months. All radiographers were HCPC registered and met the standards to ensure delivery of safe and effective services to patients. Clinical staff were required to complete continued professional development (CPD) to meet their professional body requirements. All eligible staff had revalidated their professional registrations in a timely manner.
- Key attributes to ensure staff suitability were assessed as part of the interview process which were based on predetermined questioning that aligned with the service's core values.
- In the event of any aspect of competency falling short of the required standard, the staff member's line manager was responsible for providing necessary support and guidance required to attain the relevant standard.

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- Ongoing staff competence was managed through the performance review process, for example where local audit, complaints and incidents that highlighted potential failing areas where different staff members may need support and development.
- Radiographers' scanning performance was monitored through peer review and issues were discussed in a supportive environment. Radiologists also fed back any perceived issues with scanning to enhance and learning or improvements in individual performance.
- There were clear records showing who was entitled to administer radioactive medicinal products (RMP) together with who had the necessary certificate from 'The Administration of Radioactive Substances Advisory Committee' (ARSAC).

Multidisciplinary working

- Staff working in the service had good relationships with external partners and undertook scans for local NHS providers. We saw effective and positive communication between services and staff contacted referrers for advice and support.

Seven-day services

- Operating hours for mobile scanning services were typically 7:30am until 7:30pm, however this was dependant on geographical location and local capacity requirements. AML currently offered mobile scanning services six days per week, Monday to Saturday inclusive.

Health promotion

- Information leaflets such as understanding your PET CT scan were sent to patients with their appointment letters and were available in the acute hospital waiting rooms and treatment room. These leaflets included information about what the scan would entail and what was expected of the patient before and after the scan appointment.
- Health promotion information leaflets and posters on subjects such as smoking cessation services and information on living with cancer were on display in the acute hospital waiting rooms. In addition, there was a range of information leaflets for patients and relatives, including those from Macmillan and a local counselling service which patients could take away.

Consent and Mental Capacity Act

- Staff understood the relevant consent and decision-making requirements of legislation and guidance, including the Mental Capacity Act 2005 and the Children Acts 1989 and 2004. Staff had received training on mental capacity.
- Staff were aware of what to do if they had concerns about a patient and their ability to consent to the scan. They were familiar with processes such as best interest decisions.
- There were no patients attending at the time of inspection, who lacked capacity to make decisions in relation to consenting to treatment. Staff told us if, for example, a patient with a learning disability or a person living with dementia was due to attend, they would be advised to attend with a relative or carer to provide the necessary support.
- Procedures were consented for appropriately. A corporate consent policy written was available to staff, it was written in line with national guidance. We reviewed four patient care records all included a consent to treatment record.
- We observed staff obtaining verbal consent from the patients during their interventions. Patients we spoke with confirmed their consent had been obtained throughout the scanning process.
- Scan safety consent forms were completed by all patients prior to their scan, to record the patients' consent. These also contained patient's answers to safety screening.

Are diagnostic imaging services caring?

Good 

We rated this service as **good**.

Compassionate care

- Staff cared for patients with compassion. Feedback from patients confirmed that staff treated them well and with kindness.
- Staff understood and respected patient's personal, cultural, social and religious needs, and took these into account.
- Staff took the time, where possible to interact with patients and those close to them in a respectful and considerate manner. Staff were encouraging, sensitive and supportive to patients and those close to them.

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- Staff made sure that patients' privacy and dignity was respected, for example, blinds over the window between the control and scanning room were closed while the patient moved onto the scanning plinth. Staff made patients aware of the close circuit television in the examination rooms, so they did not change in these rooms.
- Care observed met National Institute for Health and Care Excellence (NICE) QS15 Statement 1: 'Patients are treated with dignity, kindness, compassion, courtesy, respect, understanding and honesty', NICE QS15 Statement 2: 'Patients experience effective interactions with staff who have demonstrated competency in relevant communication skills', NICE QS15 Statement 3: 'Patients are introduced to all healthcare professionals involved in their care and are made aware of the roles and responsibilities of the members of the healthcare team' and NICE QS15 Statement 13: 'Patients' preferences for sharing information with their partner, family members and/or carers are established, respected and reviewed throughout their care'.
- We spoke with eight patients and two relatives, all said they had been very happy with the service their relative had received. One patient told us the staff were a credit to the company, staff made me feel so relaxed. Another patient said all staff they had met were kind and had made the difficult situation easier. No patients raised any concerns about their treatment. All said they had been treated with care, compassion and respect.
- We saw several written compliments sent to the service. One person described the kindness and empathy they had received from staff while booking their appointment. Another said how patient and kind staff had been.
- Every patient had the opportunity to complete the NHS Friends and Family Test (FFT) and indicate their likelihood to recommend the service. There was an opportunity to add free text comments on any positive or negative aspects. The FFT process used a paper-based form complete with website address so that patients may choose to complete it digitally on a personal device. The results were collated by an external provider and delivered to service managers. The service manager reviewed the results which summarised response rates. The free text comments were interrogated to enable positive staff feedback and individuals could be praised where they noted for the

quality of care delivered. Negative comments were scrutinised for opportunities to drive improvement in the service. The levels of satisfaction showed many patients were either very satisfied or satisfied.

- Patient satisfaction survey for August 2018 showed the overall satisfaction level across all was 96% with 79.4% of patients being very satisfied with the service they received, an increase from 77.3% last month. 94.8% of patients would recommend the service to their friends and family; this remained static for the last few months.

Emotional support

- Staff provided emotional support to patients to minimise their distress.
- Staff understood the impact that a patient's care, treatment or condition had on their wellbeing and on their relatives, both emotionally and socially. Staff were aware patients attending the service were often feeling nervous and anxious. Staff provided reassurance and support and demonstrated a calm and reassuring approach.
- Staff told us, if a patient became distressed, staff could take them in to a private room to talk to them to assist them to maintain their privacy and dignity.

Understanding and involvement of patients and those close to them

- Staff involved patients and those close to them in decisions about their care and treatment.
- Staff communicated with patients to ensure that they understood their care, treatment and condition. Staff took the time to explain the procedure and what would happen during their appointment.
- Staff recognised when patients and their relatives needed additional support to help them understand and be involved in their care and enable them to access this. This included, for example, access to language interpreters, sign language interpreters, specialist advice or advocates. We observed staff using their own language skills, for example speaking to a patient in their mother tongue to ensure the patient had full understanding.
- Staff made sure that patients and their relatives, were able to find further information or ask questions about their care and treatment. There was a range of leaflets available, for example, information about the scan and information about common health conditions.

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- Due to limited space in the vehicle, it was not generally possible for relatives or carers to remain with the patient for their appointment. However, in exceptional circumstances, for example, the patient required assistance to complete the forms or required additional support staff would support this.

Are diagnostic imaging services responsive?

Good 

We rated this service as **good**

Service delivery to meet the needs of local people

- The service planned and provided services in a way that met the needs of local people.
- Information about the needs of the local population was used to inform how services were planned and delivered. The Guildford service provided PET-CT scanning for a local clinical commissioning group (CCG). The units provided services through contractual agreements.
- Progress in delivering services against the contractual agreement was monitored by the CCG. Monitoring was reported through monthly contract review meetings with the acute trust, and measurement of quality outcomes for example, the patient experience. Service improvements were agreed at these regular meetings.
- The service was accessible, it was on an established bus route. There was accessible car parking.
- The facilities and premises were appropriate for the services that were planned and delivered. There was sufficient comfortable seating in the acute hospital, toilets and a water fountain a short walk from the scanning unit. Additional drinks and snacks were available in the main hospital building. Each examination room was assessed for suitability prior to its use and provided privacy and dignity. However due to the size of the service, there was insufficient space in the examination room for individuals accompanying the patient, for example, relatives or carers as well as patients.
- Information was provided to patients in accessible formats before appointments. Appointment letters containing information required by the patient such as contact details, a map and directions and information

about the intervention including any preparation such as fasting was required. The appointments letters were sent out, asked patients to contact the service if they had any queries or if they had answered yes to any of the questions on the safety questionnaire.

- All appointments were confirmed prior to the patient's appointment, by phone. This helped reduce the number of do not attend (DNA's) and provided an opportunity for the patient to ask any questions they may have had. Should a patient not be verbally contacted prior to their appointment, for example where a message had been left for the patient on an answer machine, the patient was asked to call the service to confirm their intention to attend the appointment.

Meeting people's individual needs

- The service took account of patients' individual needs. Staff delivered care in a way that took account of the needs of different patients on the grounds of age, disability, gender, race, religion or belief and sexual orientation. Staff had received training in equality and diversity and had a good understanding of cultural, social and religious needs of the patient and demonstrated these values in their work.
- Some reasonable adjustments were made so disabled patients could access and use services on an equal basis to others. Patients who were unable to climb stairs up to the unit could access a lift. All patients were encouraged in the appointment letter, to contact the unit if they had any needs, concerns or questions about their examination. However, patients were required to be able to get themselves onto the scanning plinth as equipment such as a hoist was not available. In these situations, patients could be referred to a static unit locally with facilities that better suited their needs.
- There was a system in place for managing the needs of patients living with dementia or learning disability. Staff making the referrals were able to add an alert which related to a patient's medical condition. Although generally relatives were unable to accompany patients to the scanning room due to the size of the service staff would make exception for patients with additional needs.
- Interpreters could be provided if the service was informed prior to the appointment. Staff also had access to language line, a phone translation service

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where appropriate. We observed staff translating for patients where they were able to assist. In a clinical emergency. The service enabled staff to use a family member to translate at the radiographers' discretion.

- Staff provided patients with information leaflets and written information to explain the scan process.
- During the PET-CT scan, staff made patients comfortable with padding aids. Patients were given an emergency call buzzer to allow them to communicate with staff should they wish. Microphones were built into the scanner to enable two-way conversation between the radiographer and the patient.
- The services were based at an acute hospital and there were cafés in walking distance for patients who were there for any length of time.

Access and flow

- Generally, people could access the service when they needed it. Waiting times from referral to treatment were in line with good practice. Staff told us recently there had been some supply issues with the radioactive tracer fluorodeoxyglucose (FDG) or 18-fluoroethylcholine (FEC). This had resulted in some occasions to patients' scans being delayed or postponed. In the November 2018 quality and risk report, there were 16 incidents reported where cyclotron failures had led to non-supply of FDG/FEC. This had led to cancellations of PET-CT scans. The organisation had taken appropriate action they had communicated with patients, action was being taken to stabilise supply and a letter had been sent to commissioners explaining the issue and actions taken. After the inspection, the registered manager told us the FDG supply challenges have had a higher impact at some of the mobile sites which only routinely scanned one day per week in terms of percentage performance. With regards to actual patient numbers in most cases the number of breaches in a month is less than one day of scanning. Alliance Medical (AML) had provided additional daily scanning slots or full additional days, where possible to mitigate the cancellation of patient scans due to isotope failures. Furthermore, the service had recovery plans in place for each site and monitor the capacity daily to ensure that patients who had been cancelled were rebooked into additional slots, currently these patients were being rescanned, on average, within 3 days. At some sites, the service had offered patients slots at other sites with more capacity within the area; in order to address the travel barrier to this they had

offered a door to door taxi service, funded by AML, to ensure minimal inconvenience to the patients in order to achieve their PET-CT scan at the earliest possible opportunity.

- The provider was estimated to be back on line by 18 February initially with a build to 100% by 4 March (subject to the testing and assurance process to continue on track). They had a reciprocal ad-hoc arrangement with another provider, such that if there was a shortfall of production we would contact each other to see if there was spare capacity that could be used to supply each other's customer sites. The service had agreed weekly updates of the recovery plans with National Health Service Executive (NHSE). A daily update was also provided to NHSE in the event of any isotope failures or delays that had resulted in patient cancellations, to ensure that NHSE visibility of issues and recovery.
- The provider had worked closely with the acute trust teams and CCGs to improve the quality of the service provided.
- All referrals made from May 2018 to August 2018 were offered a scan within two days. Referrals were prioritised by clinical urgency.
- All scans carried out from May 2018 to August 2018 were reported on within one day.
- Slots were not held for clinically urgent referrals as they did not receive a significant number of these. Urgent referrals were offered the first available appointment. There was an option for the patient to be scanned at another PET-CT mobile service centre if capacity at the service initially referred to, was a problem.
- Should the need arise to add an urgent referral into the waiting list when no appointments were available, the unit manager would assess appointments filled by routine, not urgent examinations and rebook patients to make room for the clinical urgent case. The rebooked patient would be given the next available appointment to suit them.
- No planned procedures were cancelled for non-clinical reasons from October 2017 to September 2018.
- There had been 202 planned procedures delayed for non-clinical reasons between October 2017 and September 2018. Most cancellations were due to breakdown of the scanner, ten of these cancellations were due to vehicle break down.

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- Appointments generally ran to time; reception staff would advise patients of any delays as they signed in. Staff would keep patients informed of any ongoing delays. On the day of inspection, there was a delay of two hours at Wolverhampton and half an hour at Guildford. This was due to the late arrival of the fluorodeoxyglucose (FDG). Reception staff informed patients on arrival, staff apologised to patients for the delay.
- Reporting on scans was carried out by the trust radiologists, the service did not report on reporting times. However, staff told us urgent scans were reported on within 24 hours. This met national guidance.

Learning from complaints and concerns

- The service treated concerns and complaints seriously, investigated them and learned lessons from the results, and shared these with all staff.
- Patients we spoke with told us they knew how to make a complaint or raise concerns about the service.
- A patients' guide to making comments, compliments and concerns was available in the units. Staff would also provide these to patients upon request and/or when the local staff recognised its need.
- The service received eight written compliments and twenty complaints between October 2017 and September 2018.
- Eight of the twenty complaints were managed under the formal complaints' process. All were upheld after investigation.
- AML had a management of concerns and complaints' policy and procedure; all staff were obliged to acknowledge and comply with this process.
- The registered manager was responsible overseeing the management of complaints at the service. We saw evidence in the team meeting minutes, learning from complaint investigations were discussed and recorded.

Are diagnostic imaging services well-led?

Good 

We rated this service as **good**.

Leadership

- Managers at all levels in the service had the right skills and abilities to run a service providing high-quality sustainable care.
- Leaders had the skills, knowledge, experience and integrity to manage the service. The mobile service employed a full time, whole time equivalent (WTE) service manager, who was a radiographer. They were the registered manager for the service. There was also a senior manager in the south who managed the services whilst they were in their region. There were four regional unit managers who provided day to day management of each mobile unit.
- The managers were knowledgeable in leading the service. They understood the challenges to quality and sustainability the service faced and had pro-active ongoing action plans in place to address them.
- The registered manager was fully aware of the scope and limitations of the service, based on the size, numbers and type of staff, and type of work booked for. All staff told us leaders were keen to keep developing the service to ensure the patients received a quality service.
- Staff we spoke with found the registered manager and regional managers to be approachable, supportive, and effective in their role. They had daily phone contact with the regional managers

Vision and strategy

- The service had a vision for what it wanted to achieve and workable plans to turn it into action.
- The provider had a clear vision and a set of values, with quality and safety the top priority. The service's managing director described how as an organisation, they had a responsibility to continue to grow the services they provided, they had also invested in their teams, infrastructure and approach to quality to ensure they could continue to deliver on their key quality goals: 'The provision of safe, effective and timely services; ensuring measured, responsible outcomes from our services; and the provision of an experience that meets stakeholders' expectations.'
- The statement of purpose identified the aims and objectives of the service:
 - "Our aim is to provide high standards of diagnostic PET-CT scans to meet the needs of the referrers to support diagnosis and care planning of patients as part of the National PET-CT contract as commissioned by NHS England.

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- Services are delivered from various locations as agreed by the commissioner via Mobile Units, which are transient between regions as required.
- All equipment is of an agreed specification that is maintained in accordance with manufacturer's requirements supported by PPM programmes.
- The mobile PET-CT team look to employ and retain capable and competent people that aim to provide effective care and support to patients, carers, relatives and the public accessing the service.
- All staff work in accordance with approved policies, procedures and guidelines in support of evidence-based practice.
- Staff professional development is supported via mandatory and staff group training programmes, making sure that all staff are knowledgeable within their area of practice.
- The PET-CT mobile service aims to learn from incidents, complaints, audits and responds to customer feedback to continually improve services, sharing lessons across all areas of the business.
- The services provided are subject to continual monitoring and audit to make sure that a high-quality service is delivered and maintained.
- The PET-CT mobile is supported within the Alliance Medical's robust Integrated Governance framework which through adopting and sharing evidence-based practice aims to provide diagnostic imaging to the highest standards of quality and safety.
- The PET-CT mobile aims to provide flexible booking arrangements to make sure that examinations can be carried out as soon as possible at a time convenient to the patient."
- Alliance Medical Ltd (AML) operated a collaborative approach to diagnostic imaging working with clinicians, local NHS providers and independent providers to keep the patient at the heart of their service. The collaborative approach to imaging services aimed to future proof the service, provide access to emerging clinical and technological developments and support research programmes, while supporting local pathways of care. The strategy was monitored through the clinical governance meeting and board meetings.
- The service values were:
 - 'Collaboration: We work together and in partnership for all of our patients. We respect expertise and combine it to achieve more
 - Excellence: We never compromise. We strive to deliver the very best in everything we do to ensure the highest quality of care. We treat our patients and each other with compassion, dignity and respect.
 - Efficiency: Efficiency in healthcare means more patients get better care. We constantly seek new ways to use the scarce resource of healthcare more intelligently so that more people can live longer, fuller lives.
 - Learning: Knowledge and understanding comes from learning. At AML we are committed to ensuring that each and every one of us keeps on learning and that we continuously look for improved ways of working.'
- Staff were aware and understood what the vision and values were and understood the strategy and their role in achieving it. Staff told us were a major part in the way they worked All staff were introduced to these core values at the corporate induction and then through their annual appraisal.

Culture

- Managers across the service promoted a positive culture that supported and valued staff, creating a sense of common purpose based on shared values.
- The registered manager and head of services for the south region promoted a positive culture that supported and valued staff, creating a sense of common purpose based on shared values.
- The service's culture was centred on the needs and experience of patients. This attitude was reflected in staff we spoke with on inspection.
- Equality and diversity was promoted, it was part of mandatory training, and inclusive, non-discriminatory practices were part of usual working.
- The provider had a whistle blowing policy and duty of candour policy which supported staff to be open and honest. The provider had appointed a freedom to speak up guardian. Staff were aware how they could raise concerns. Staff described the principles of duty of candour to us. Staff told us they attended duty of candour training.
- AML held an Investors in People award. Investors in People award is the standard for people management. The standard defined what it takes to lead, support and manage people for sustained success." In March 2017, AML achieved reaccreditation for the new generation six standards, the process for which engaged a far wider range of employees through 'quantitative' data to

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support the qualitative data gathered during interviews at a later stage. A context meeting with senior managers explored the ambition of the organisation which would: 'allow for people management practices to be assessed in line with our context and ambition as an organisation.'

- All independent healthcare organisations with NHS contracts worth £200,000 or more are contractually obliged to take part in the Workforce Race Equality Standard (WRES). Providers must collect, report, monitor and publish their WRES data and act where needed to improve their workforce race equality. The provider had produced a WRES report in 2017. There was clear ownership of the WRES report within the provider management and governance arrangements, this included the WRES action plan reported to and considered by the board.

Governance

- The service improved service quality and safeguarded standards of care by creating an environment for excellent clinical care to flourish.
- There were governance frameworks to support the delivery of good quality care. The service undertook several quality audits, and information from these assisted in driving improvement and giving all staff ownership of things had gone well and action plans identified how to address things needed to be improved.
- Local governance processes were achieved through regional governance meetings and local analysis of performance, discussion of local incidents. Due to the large geographical area covered it was difficult for the service to have a whole team. The manager would ensure necessary information was shared with staff through email or one to one meetings or phone calls.
- Feedback and actions from performance discussion of local incidents were fed into processes at a corporate level. Staff were clear about their roles and understood what they were accountable for. All clinical staff were professionally accountable for the service and care that was delivered within the unit. Staff told us information was shared with them during one to one meeting and phone calls.
- Working arrangements with partners and third-party providers were managed. For example, there was a service level agreement between the service and local

acute trusts. Monthly quality reports were issued, and regular meetings were held with the radiology services manager at the acute trust to discuss the service provided.

- The registered manager was the governance and quality monitoring lead for the service.
- There were processes in place to ensure staff were fit for practice, for example, they were competent and held appropriate indemnity insurance in accordance with The Health Care and Associated Professions (Indemnity Arrangements) Order 2014.
- Staff working with radiation were provided with training in the regulations, radiation risks, and use of radiation. Staff were aware of the changes made by the introduction of the Ionising Radiation Regulations 2017 (IRR17) and the Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R17) which had been introduced in February 2018.

Managing risks, issues and performance

- The service had systems to identify risks, plan to eliminate or reduce them, and cope with both the expected and unexpected.
- There was a risk assessment system in place locally with a process of escalation onto the corporate risk register. The local risk register was reviewed and updated. However, it did not contain all identified risks.
- The local risk register included risks such as attack or injury whilst working alone on the mobile unit, securing medicines and transferring the radioactive waste to site at the end of service. An action log was also included identifying timescales and accountability. However, we could not see that there was any reference to supply issues with fluorodeoxyglucose (FDG) or 18-fluoroethylcholine (FEC). In the November 2108 quality and risk report, there were 16 incidents reported where cyclotron failures had led to non-supply of FDG/FEC.
- Performance was monitored on a local and corporate level. Performance dashboards and reports were produced which enabled comparisons and benchmarking against other services. Information on turnaround times, 'did not attend rates', patient engagement scores, incidents, complaints, mandatory training levels amongst others were monitored.

Managing information

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- The service collected, analysed, managed and used information well to support all its activities, using secure electronic systems with security safeguards. Electronic patient records were kept secure to prevent unauthorised access to data however authorised staff demonstrated they could be easily accessed when required.
- The service was aware of the requirements of managing a patient's personal information in accordance with relevant legislation and regulations. General Data Protection Regulations (GDPR) had been reviewed to ensure the service was operating within the regulations. Staff viewed breaches of patient personal information as a serious incident and would therefore manage this as a serious incident and escalate to the appropriate bodies.
- Staff had access to AML policies and resource material through the internal computer system. Staff were able to locate and access relevant and key records easily, this enabled them to carry out their day to day roles.
- There were sufficient computers available to enable staff to access the system when they needed to.
- There was regular engagement with commissioners to understand the service they required and how they could be improved. This produced an effective pathway for patients. The service had a good relationship with the local NHS trusts where mobile units were based.
- AML launched a high-performance initiative under the title, 'Getting Better Every day' in 2018. An in-depth diagnostic review was undertaken following this to deliver against five workstreams: Strategy, Structure, Workforce, Process and Technology. All employees were invited to participate in the workstream design and delivery. Employee engagement was also measured through an annual employee survey which was conducted by an independent organisation to ensure confidentiality. In response to the survey, action plans were developed and progress against the plans was measured on a regular basis.
- The service had a good relationship with the local NHS trusts attended by the mobile units. The service engaged regularly with staff at the acute trusts to discuss the service provided.

Engagement

- The service engaged with patients, staff, the public and local organisations to plan and manage appropriate services and collaborated with partner organisations effectively.
- Patients' views and experiences were gathered and used to shape and improve the services and culture. Patient surveys were in use, the questions were sufficiently open ended to allow patients to express themselves. We saw changes were implemented following feedback from patients.

Learning, continuous improvement and innovation

- The service was committed to improving services by learning from when things went well or wrong, promoting training, research and innovation.
- Staff could provide examples of improvements and changes made to processes based on patient feedback, incidents and staff suggestion. For example, staff were able to tell us the actions the service was taking to manage the difficulty in accessing fluorodeoxyglucose.

Outstanding practice and areas for improvement

Areas for improvement

Action the provider SHOULD take to improve

- When administering fluorodeoxyglucose (FDG) or 18-fluoroethylcholine (FEC) to patients, the service should review the opportunity for a second clinician to check the dosage prior to administering. While there were checks when the radiopharmaceutical was

dispensed, drawn up and level of radioactivity measured, a final four or five-way check immediately prior to injection of patient verses, demographics, verses intended exam, verses radioactive medicinal products (RMP) identity verses RMP activity, would be a useful 'fail-safe'.