

Poole - Atlantic Enterprise UK Limited t/a The Diver Clinic

Quality Report

7 Parkstone Road, Poole, BH15 2NN

Tel:01202 678278

Website: www.thediverclinic.com

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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

Summary of findings

Letter from the Chief Inspector of Hospitals

Atlantic Enterprise UK Limited, trading as The Diver Clinic, has provided a service to NHS patients in Poole since 1992. We inspected the service on 15 December 2015. The hyperbaric unit is located in the centre of Poole in Dorset, close to local diving centres and the local acute NHS hospital. The unit is commissioned to provide hyperbaric (high-pressure) oxygen therapy for divers with conditions requiring compression. The service is available to NHS patients of all ages.

We carried out a comprehensive inspection of this service. The team inspected the full hyperbaric service against criteria to judge whether treatment and care was safe, effective, caring, responsive and well-led.

Are services safe?

Patients were protected from the risk of abuse and avoidable harm. There were processes for reporting and learning from incidents. The clinic was visibly clean and there were good infection prevention and control practices to reduce the risk of infection. Patients were assessed to make sure only those that were suitable received treatment at the clinic. Patient risks were reviewed and patients were appropriately monitored during their treatment. Staff were aware of processes to follow in the event of an emergency. Equipment was well maintained and tested in line with manufacturer and national guidance. Medicines were managed in a safe manner. An on call rota ensured staff numbers and skill mix met the needs of patients and complied with the national guidelines.

Are services effective?

Patients were fully assessed and treatment was based on best practice. Staff had access to the information they needed to provide effective treatment. Patients were pleased with their health outcomes. They were provided with clear information, for example about potential side-effects, and the service followed up on their progress following treatment. Patients were kept well hydrated. Pain relief was available if required. Appropriate regard was paid to the requirements of the Mental Capacity Act 2005. Staff were experienced, well trained and well supported through training and appraisals. There was strong team working, including with other agencies. Emergency treatment was available 24 hours a day, every day of the year

Are services caring?

Patients and relatives commented positively about the care provided from all staff, describing the care as “excellent.” They said staff took consideration to protect their privacy and dignity. Patients were fully involved in making decisions about their treatment, having full explanations about the proposed treatment and any associated risks explained to them. Staff considered the emotional needs of patients. Patients expressed that staff made them feel at ease during the course of treatment. There was consideration of patients particular needs after treatment was finished. Staff ensured patients had transport to take them home or arranged accommodation at local guest houses to alleviate concerns with getting home during the night.

Are services responsive?

The clinic provided a 24 hour, seven day on call emergency service with patients commencing treatment within two hours of referral. The service was patient centred, and feedback was positively encouraged. Changes were made to the service in response to patient feedback in order to improve patient experience. A complaints policy was in place, but no complaints had been received.

Are services well led?

Summary of findings

Strong clinical and professional leads were provided by the medical directors, managing director and the registered manager. All the members of the team with whom we spoke shared a strong commitment to providing the best possible service to patients which reflected the clinics stated mission. The quality of the service was monitored. Risks were assessed and action taken to reduce them. There was an open and honest culture. Feedback from patients and staff was encouraged and used to improve the quality of the service.

Our key findings were as follows:

- The service was well equipped and well maintained, with careful attention to all aspects of safety.
- The service provided resulted in good outcomes for patients.
- The staff at the hyperbaric unit were compassionate and caring.
- The service was appropriately staffed with well qualified doctors, nurses and technical staff, and was responsive to patient's individual needs.
- The directors and registered manager provided a strong lead and team working was effective.

In addition the provider should:

- The provider should consider revising policies to make them fully relevant to the clinic's practices.
- The provider should consider copying patients into discharge letters sent to their GPs.

Professor Sir Mike Richards
Chief Inspector of Hospitals

Summary of findings

Our judgements about each of the main services

Service

Hyperbaric Therapy Services

Rating Summary of each main service

We found that the services provided by the Diver Clinic were safe, effective, compassionate, responsive and well led. This was because the service took care in ensuring the safety of patients (and staff) and secured positive patient outcomes. Staff were competent, caring and professional, and they had the information and training they needed to provide effective care to patients.

There was highly effective multi professional team working and very quick access to treatment. The service was patient-centred and took into account the needs of different people.

We saw strong and effective leadership. There was an open and transparent culture. The low staff turnover reflected the positive regard in which staff held the service and their colleagues. The directors and registered manager used governance and performance management to maintain and improve the quality of the service.

Summary of findings

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Summary of this inspection

Background to Poole - Atlantic Enterprise UK Limited t/a The Diver Clinic

Atlantic Enterprise UK Limited trading as The Diver Clinic has provided a service to NHS patients in Poole since 1992. We inspected the service on 15 December 2015. The hyperbaric unit is located in the centre of Poole in Dorset, close to local diving centres and the local acute NHS hospital.

The unit is commissioned to provide hyperbaric (high-pressure) oxygen therapy for divers with conditions requiring compression. The service is available to NHS patients of all ages. There are no inpatient facilities at the clinic.

The registered manager, Mr Spencer Phillips, has been in post since 1992.

The previous CQC inspection was undertaken in March 2013. At this time the service was meeting all the inspected standards.

How we carried out this inspection

The inspection was carried out by an inspector and a manager from the Care Quality Commission and a specialist advisor, a hyperbaric physician.

We carried out this announced inspection on Tuesday 15 December 2015. We talked with the managing director, the two medical directors, the registered manager and six

members of staff, including doctors, nurses and the technical staff. We also had conversations with four former patients. We reviewed performance information from and about the unit.

We reviewed patients' clinical records. Prior to the announced inspection, we reviewed a range of information we had received from the service.

Information about Poole - Atlantic Enterprise UK Limited t/a The Diver Clinic

The service is available 24 hours a day, 365 days per year.

Hyperbaric oxygen treatment involves breathing pure oxygen at higher than atmospheric pressure in an enclosed chamber. At the time of our inspection the service had two chambers. The service is a 'Category 1' facility which means it can care for critically ill patients who might need advanced life support.

Between December 2014 and December 2015 the service treated 60 patients requiring emergency assessment and treatment. 44 of these patients required compression treatment in a chamber. Only one of these patients was a child, who was over the age of 12.

The management structure of the clinic consisted of the managing director, two medical directors and the registered manager.

Detailed findings from this inspection

Hyperbaric Therapy Services

Safe

Effective

Caring

Responsive

Well-led

Information about the service

Atlantic Enterprise UK Limited t/a The Diver Clinic is located in Poole adjacent to an acute NHS hospital. The service is known locally as the Diver Clinic, which it shall be referred to as in this report.

The clinic is commissioned by NHS England to provide emergency services for divers with disorders requiring compression. Referrals are taken from across Dorset and Somerset. The clinic was a category 1 chamber. This meant treatment could be given to critically ill patients who required intensive monitoring and respiratory support including artificial ventilation. The previous CQC inspection was undertaken in March 2013. At this time the service was meeting all the inspected standards.

Summary of findings

We found that the services provided by the Diver Clinic were safe, effective, compassionate, responsive and well led. This was because the service took care in ensuring the safety of patients (and staff) and secured positive patient outcomes. Staff were competent, caring and professional, and they had the information and training they needed to provide effective care to patients.

There was highly effective multi professional team working and very quick access to treatment. The service was patient-centred and took into account the needs of different people.

We saw strong and effective leadership. There was an open and transparent culture. The low staff turnover reflected the positive regard in which staff held the service and their colleagues. The directors and registered manager used governance and performance management to maintain and improve the quality of the service.

Hyperbaric Therapy Services

Are hyperbaric therapy services safe?

By safe, we mean that people are protected from abuse and avoidable harm.

Patients were protected from the risk of abuse and avoidable harm. There were processes for reporting and learning from incidents. The clinic was visibly clean and there were good infection prevention and control practices to reduce the risk of infection. Patients were assessed to make sure only those that were suitable received treatment at the clinic. Patient risks were reviewed and patients were appropriately monitored during their treatment. Staff were aware of processes to follow in the event of an emergency.

Equipment was well maintained and tested in line with manufacturer and national guidance. Medicines were managed in a safe manner.

An on call rota ensured staff numbers and skill mix met the needs of patients and complied with the national guidelines.

Incidents

- Staff understood the process for reporting incidents, knew what type of incidents required reporting and knew where to access the relevant paper work to report incidents if they occurred.
- There had been no incidents requiring reporting at the Diver Clinic in the last 12 months
- Management and Medical Advisory Committee (MAC) meeting agendas provided opportunities to discuss any adverse events which could include adverse outcomes for patients. This included events that had occurred across national hyperbaric services as well as any that might occur at the inspected service.
- Staff had a basic understanding of the Duty of Candour legislation. However, the clinic policies did not detail their responsibilities with regard to this legislation. Duty of Candour legislation requires healthcare providers to disclose safety incidents that result in or posed risk of moderate or severe harm, or death. Any reportable or suspected patient's safety incident falling within these categories must be investigated and reported to the patient, and any

other 'relevant person,' within 10 days. Organisations have a duty to provide patients and their families with information and support when a reportable incident has, or may have occurred.

- The registered manager and one of the directors were registered with the Central Alerting System (CAS), which ensured they received patient safety alerts in a timely manner. CAS is a web-based cascading system for issuing alerts, important public health messages and any other safety critical information and guidance to NHS and other organisations, including independent providers of health care. Records kept at the clinic showed the CAS alerts were reviewed promptly and where required appropriate action was taken to protect the safety of patients.

Cleanliness, infection control and hygiene

- There had been no incidents of healthcare acquired infections in the 12 months before the inspection.
- All areas were visibly clean.
- Hand washing facilities, which included antibacterial hand disinfectant gel, were available throughout the clinic.
- Personal protective equipment (PPE), such as gloves and aprons, was readily available for staff in all clinical areas, to ensure their safety when performing procedures. We saw staff using them appropriately.
- Advice and support regarding infection control practices was available through a service level agreement with the infection and prevention team at the local NHS acute trust.
- Infection control audits were completed with the use of an infection control self-assessment tool that had been developed with support from the local NHS hospital infection prevention and control team. The assessment tool looked at the environment, waste disposal, disposal of sharps, and decontamination of equipment, hand hygiene and clinical practice. The most recent assessment completed in December 2015 identified no concerns with infection prevention and control practices and identified staff were compliant with following hand hygiene processes.
- Housekeeping and cleaning schedules were followed to ensure effective cleaning of the clinic. Daily cleaning

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was completed by the clinic staff. Treatment records evidenced the chamber and treatment areas were thoroughly cleaned and made ready for the next patient after patients were discharged. Conversation with staff confirmed cleaning and decontamination of the environment and equipment was completed once a treatment was completed.

- The policy on infection control dated February 2015 had specific guidance for staff to follow regarding the cleaning and decontamination of equipment specific to the service such as hyperbaric breathing equipment.
- Laundering of linen was subcontracted to another service provider. Procedures were followed to ensure used and soiled linen was stored in a manner that reduced risks of cross infection, prior to collection by the laundering service. Staff said the laundry company was promptly in responding to requests to collect linen for laundering.
- A microwave for the use of staff was located in the staff toilet and changing room. This was removed during the course of the inspection, as it did not promote safe food hygiene practices.

Environment and equipment

- The environment consisted of a relative's waiting room, an assessment room and two hyperbaric chambers that were located in interconnecting rooms.
- Equipment was visibly clean.
- There was a structured programme for the maintenance of equipment using external contractors with extra maintenance and testing carried out by the clinic. Maintenance records showed maintenance, testing and servicing of the specialised hyperbaric equipment complied with legal requirements and guidance from the British Hyperbaric Association (BHA). The clinic went beyond the legal requirements for testing and maintenance of the chamber and pressure systems. The clinic requested thorough examination of the chambers and pressure systems annually, rather than every two years as required legally. Gauges measuring the level of oxygen in the

chambers were serviced every six months in line with recommended guidance. Certificates evidenced servicing and maintenance of equipment was carried out in line with recommended guidelines.

- Emergency equipment, including resuscitation equipment for adults and children, was available in the assessment room and the chamber rooms. Emergency equipment was checked and replenished after each treatment was completed, and checked before the arrival of a new patient. Records evidenced this occurred.
- The clinic provided guidance about the safe use of equipment for staff to refer to, which included instruction about the maintenance, storage and cleaning of equipment.
- Emergency generator back up ensured continuity of service and patient treatment in the event of an electrical failure.
- Staff we spoke with were clear on the procedure to follow if faulty or broken equipment was found. They confirmed faulty equipment was repaired or replaced promptly. There had been no incidents of treatment delayed because of faulty equipment.
- There was two-way communications into and from the chamber via speakers which were used throughout treatment. Close circuit television (CCTV) enabled the chamber operator to monitor the wellbeing of patients and the chamber assistant during treatments.
- There was appropriate equipment to transfer a patient into the larger of the two chambers if they were not well enough to walk into the chamber independently.
- Equipment to ventilate a critically ill patient inside the chamber was available and in working order.

Medicines

- The clinic had a service level agreement with the pharmacy service at the local acute NHS hospital to provide support and guidance with the management of medicines. Pharmacy technicians from the hospital visited the clinic monthly to check stock levels and provide advice.
- Medicines were securely locked in cupboards. Each cupboard had a stock list which detailed the expiry

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date of each medicine. Medicines that required storage below a certain temperature were stored in a locked fridge, specifically for that purpose. We saw the minimum and maximum temperatures were checked daily and when required readings were outside the safe parameters, were reported promptly.

- Intravenous fluids were stored in locked cupboards.
- All medicines administered to patients at the clinic were prescribed by the attending hyperbaric doctor. Records evidenced this prescribing. Medicines were administered by the doctor or the healthcare professional supporting the patient in the chamber.
- There were in date medicine guides for both adults and children to support medical staff with prescribing safe doses of medicines for patients.

Records

- Patient records were stored securely. Detail of individual patient treatment, timing of the treatment, the attending doctor, the chamber operator and the member of staff supporting the patient in the chamber were recorded in a treatment diary stored in a locked cabinet in the chamber room. The same diary detailed patient's' response to the treatment.
- All other patient records, including copies of emergency services reports, admission and treatment plan details, assessment of patients condition and wellbeing, consent forms and copies of correspondence to patients and their GP's were kept in locked cabinets in the manager's office.
- Admission packs that included blank assessment forms and consent forms were available in the assessment room. This allowed prompt recording of patient's assessments on admission to the centre so decisions could be made in a timely manner about the type and amount of treatment each patient needed.
- We reviewed records for five patients. Records were clear and legible and were dated, timed and signed by the practitioner making the entry.

Safeguarding

- There was a safeguarding policy dated February 2015. This provided guidance for staff about safeguarding, including descriptions of different types of abuse and contact numbers for the local authority safeguarding

for adults and children. The policy detailed staff must receive training about the protection of vulnerable adults and children annually. Training records and conversations with staff confirmed this happened.

- Discussions with staff evidenced they had a good understanding about safeguarding procedures. They knew the action they needed to take if they suspected a patient had been subject to abuse or of a person made an allegation that abuse had occurred.

Mandatory training

- There was a plan of required mandatory training that included infection prevention and control, safeguarding vulnerable adults and children, health and safety at work, intermediate and advanced life support, conflict resolution and the management and working of specific equipment used in the treatment of patients. Training was monitored and records showed that all staff working at the clinic were fully up to date with their required training.
- Evidence of completed mandatory training in other healthcare organisations was considered as staff completing training in that specific subject. Staff confirmed the registered manager required them to evidence their training before signing them off has having completed mandatory training for their role at the clinic.

Assessing and responding to patient risk

- Conversations with staff evidenced they knew risks posed to patients, and themselves, if working in the chamber, and by the use of hyperbaric treatment. For example oxygen toxicity, convulsions, ear/sinus pain and perforated ear drum. Processes were followed to ensure both patients and the member of staff attending to the patient in the chamber were continually observed and monitored.
- CCTV monitoring allowed the chamber operator to continually visually monitor the wellbeing of all people in the chamber. Two-way communications between staff and patients in the chamber and the chamber operator was by an intercom system.
- Patients we spoke with said they had been fully informed of risks associated with the treatment and were able to explain the associated risks. They said staff in the chamber and outside the chamber

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continually checked they were not developing any signs of complications during the treatment. Records evidenced monitoring of risks was carried out during treatment.

- Patient records evidenced the hyperbaric doctor assessed patients prior to treatment, which included assessing any known health conditions, which included claustrophobia, which might pose risk to the patient. This met BHA guidelines.
- The BHA guidelines indicate that whilst a patient is undergoing treatment a doctor should be “in the vicinity of the chamber.” The hyperbaric doctor remained on-site until they were satisfied the patient was having no ill effects as a result of the treatment and returned to assess the patient the end of treatment. During this time the hyperbaric doctor was required to be able to return to the clinic within 20 minutes and to be available by phone at all times. Conversations with the doctors and other staff at the clinic showed this practice was always followed. When the patient’s condition required it, the doctor would stay at the clinic for the duration of the treatment, and would attend to the patient in the chamber if their condition required it.
- There were clear procedures to follow in the event of medical emergencies. All staff had completed intermediate or advanced lifesaving training and could commence resuscitation if required in and out of the chamber. Although not all staff had completed formal paediatric lifesaving training, there was clear guidance and child algorithms for staff to follow in the event of a child requiring resuscitation, Child algorithms for resuscitation were also covered on the lifesaving training.
- The clinic used a modified version of the early warning system (EWS) used by the local acute NHS hospital to identify if patients were deteriorating clinically. This had to be modified as the use of hyperbaric treatment meant patients oxygen saturation levels did not fit into the normal parameters of the early warning system. There was clear guidance on the EWS charts about the action staff needed to follow in the event of a patient’s observations deviating from the normal parameters.
- All the medical staff had admitting rights to the local acute NHS hospital, which meant patients were

transferred promptly to the hospital if their condition required it. The clinic’s discharge policy included guidance in the event of a patient requiring transfer to the acute NHS hospital.

Staffing

- The clinic provides an on-call emergency service. An on-call rota ensured appropriate staff were available to respond immediately if a patient was referred to the clinic for treatment. Rotas reviewed showed there to be full cover of the clinic 24 hours, seven days a week. Staff that we spoke with confirmed there had not been any concerns with staffing numbers in the 12 months before the inspection.
- Four experienced staff (in accordance with the BHA guidelines) were always required to be present for the duration of treatment. These included a hyperbaric physician, a chamber supervisor, a chamber operator and an in chamber assistant.
- The hyperbaric physician role was provided by seven doctors working under practicing privileges on a zero hours contract with the clinic.
- There were three full time chamber supervisors and two on zero hours contracts. Chamber supervisors carried the on-call phone and were the first point of call in a diving emergency or for advice.
- The chamber operator and in-chamber assistant roles were covered by a nurses, paramedics or divers who were trained in this speciality. The in-chamber assistant accompanies patients at all times.
- The chamber operator monitored patients through a chamber window and via CCTV. This provided an additional check on how individual patients (and the in-chamber attendant) were coping with the treatment and enabled the chamber operator to alert the in-chamber attendant if a patient showed signs of distress.
- The medical staff had access to advice and support from the local acute NHS hospital if needed. One of the two medical directors were available at all times to provide advice and support to staff if required.
- Because of the natural timing of diving incidents, treatment at the centre usually occurred in the late afternoon and into the night. This meant patients had

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the same team of staff for their treatment and there was no need to hand over their treatment to an oncoming shift. In situations where patients required more than one episode of hyperbaric therapy treatment, a verbal handover by telephone or face to face ensured staff had the required details to provide care and treatment to the patient in a safe manner. It was usual practice for the same doctor to treat the patient in these circumstances, promoting continuity of care and treatment.

Major incident awareness and training

- The clinic had a policy on major incidents, dated February 2015. This included business continuity plans to be followed in the event of failure of essential services.
- Staff received fire training and were aware of contingency plans in the event of power failure or other technical emergencies.

The clinic was connected to a back-up generator to ensure continuity of service in the event of a power failure.

Are hyperbaric therapy services effective? (for example, treatment is effective)

By effective, we mean that people's care, treatment and support achieves good outcomes, promotes a good quality of life and is based on the best available evidence.

Patients were fully assessed and treatment was based on best practice. Staff had access to the information they needed to provide effective treatment. Patients were pleased with their health outcomes. They were provided with clear information, for example about potential side-effects, and the service followed up on their progress following treatment. Patients were kept well hydrated. Pain relief was available if required. Appropriate regard was paid to the requirements of the Mental Capacity Act. Staff were experienced, well trained and well supported through training and appraisals. There was strong team working, including with other agencies. Emergency treatment was available 24 hours a day, every day of the year.

Evidence-based care and treatment

- Evidence-based care and treatment was provided. All treatments were in-line with recognised British Hyperbaric Association guidance and underpinned by recognised international diving guidance.
- There was an annual programme for reviewing treatment protocols against best practice guidelines, including the National Institute for Clinical Excellence (NICE) and the BHA. We saw policies and protocols referred to in these guidelines.
- In order to be a member of the BHA, the service had to comply with standards such as the Health and Safety at Work Act, and the Diving at Work regulations. Conversations with staff and review of documents evidenced the service was complying with these regulations.
- The chamber was a category one chamber, which meant ventilated patients could be treated in the chamber. A service level agreement with the nearby acute NHS hospital meant an anaesthetist or intensivist was present when a ventilated patient was admitted to the chamber. This meant the service could meet the requirements of the Royal College of Anaesthetists and the BHA guidelines. However, we were advised by the registered manager that there had been no ventilated patients admitted in the previous 12 months.
- The clinic was able to treat children and had access to the paediatric team, including paediatric consultants, at the local acute NHS hospital for advice and support. This met the BHA guidelines for treatment of children in a hyperbaric chamber.
- There was no national guidance for response time for emergency treatment. Staff told us that literature and their experience indicated the quicker treatment commenced the better outcomes were for patients. The clinic's policies detailed staff needed to be able to get to the clinic within 20 minutes of being advised of the possible admission. If the patient was being transferred by coastguard or ambulance helicopter, the hyperbaric doctor on-call carried out an initial assessment of the patient at the helicopter landing site. Conversations with staff and looking at records showed this happened. This meant patients were assessed promptly and where required treatment

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commenced immediately following assessment. Data submitted to NHS England evidenced that patients were consistently commencing treatment within two hours of being referred to the clinic.

- An audit programme that included gas traceability audits, patient records audits and cleanliness of infection control audits, meant there was continual scrutiny of the service.

Pain relief

- Patient records and the treatment log book evidenced patient's pain was monitored.
- Pain relieving medicines could be administered during treatment. Staff told us it was infrequent that pain relief medicine had to be administered, as pain was generally relieved once the hyperbaric treatment had commenced. Patients that we spoke with said they were asked if they needed any pain relieving medicine.

Nutrition and hydration

- Patients were provided warm and cold drinks throughout the treatment. The clinic did not have the facility to prepare meals for patients. Instead local take away services were used. Patients spoke about menus being provided and being able to choose their preferred takeaway meal.
- Staff had the skills and appropriate equipment and supplies were available for patients to have an intravenous infusion to support hydration if required.

Patient outcomes

- The clinic submitted outcome data on both a quarterly and annual basis to NHS England and to the BHA.
- The standard contract for NHS England required the unit to comply with key generic outcome measures. These included: the percentage of divers returning to a pre-morbid state; the average time from referral to treatment; the percentage of patients who felt information was adequate and felt safe. Results from this data for the period July 2014 to September 2015 showed there had been no adverse effects for patients receiving hyperbaric oxygen treatment. All patients were satisfied with the information provided and

decision making process, all felt safe and secure and felt their privacy and dignity were respected. The data showed all patients commenced treatment within two hours of referral to the clinic.

- Patients were pleased with the outcomes of their treatment. They told us that they had been made aware of the potential side effects but had none of the people with whom we spoke had suffered any symptoms. They confirmed that clinical staff checked their hearing and eyesight at intervals during the course of treatment.

Competent staff

- Patients we had conversations with said the staff providing the treatment and looking after them were skilled and competent.
- Most of the chamber attendants or chamber operators and all of the doctors worked in a variety of other roles. Their backgrounds included critical care, operating department practitioners, paramedics and divers.
- Medical staff completed specialised training for hyperbaric medicine, following national and international guidance. Evidence of completion of this training and required updates were provided to the clinic. Auditing of staff files ensured all medical staff had completed the required training.
- Monthly audits of staff files ensured all staff were up to date with required training and their annual 'dive medical' to ensure they were fit to work in the chamber. Records showed training met the guidelines set out in the BHA's document "The training and education of hyperbaric unit personnel."
- All staff working at the clinic had an annual appraisal. Monthly auditing of personal records ensured all staff were up to date with appraisals. We saw records at the clinic confirming all staff were up to date with their appraisals.
- The medical advisory committee had opportunity to contribute to medical staff appraisals as part of the GMC revalidation process.

Multidisciplinary working

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- There was good evidence of the clinic working with other healthcare professionals to provide effective for patients.
- There were coordinated responses from the medical staff at the clinic and emergency medical staff at the local acute NHS hospital when patients arrived by coastguard or ambulance helicopter. Medical staff from both services attended the air ambulance landing site to make a joint decision whether the patient needed to be treated in the hyperbaric chamber or whether they had injuries that need stabilising at the acute hospital prior to hyperbaric treatment. This practice was confirmed in conversations with patients and staff and by reviewing documents.
- The clinic had several service level agreements with the local acute NHS hospital, some of which included pharmacy provision, infection prevention and control advice, availability of anaesthetist or intensivist to provide care for ventilated patients and access to paediatric advice and support in the event of a child requiring treatment.
- As part of their plan of treatment some patients required more than one session in the chamber. In these situations patients were admitted to the local acute NHS hospital and were transferred daily by ambulance transport to the clinic for their treatment. Staff at the clinic recognised hyperbaric treatment is a specialised service and that hospital staff were concerned they might not have the skills to provide care for patients in-between their treatments. In response, staff at the clinic had produced a resource booklet that gave hospital staff guidance about caring for such patients. This multidisciplinary approach meant patients received consistent care.
- Because of the nature of the treatment provided most patients finished their treatment in the middle of night. The dive centre worked in partnership with patients and local hotels to ensure patients had some where to spend the night once their treatment was completed.
- The clinic reported a good relationship with the Maritime and Coastguard Agency.
- Diving centres said the Diver Clinic responded promptly to any queries and referrals.

Seven-day services

- The clinic operated a seven day on call emergency service. An on-call rota ensured appropriate (doctor, chamber operator, chamber attendant and chamber supervisor) staff were available to respond to an emergency at all times. This included a second line on-call rota in the event of a second patient requiring treatment at a different time or a different 'table' of treatment.
- We contacted local diving centres, all who confirmed the facilities at the Diver Clinic were always available seven days a week.
- The clinic had access to support from the local acute NHS hospital seven days a week.

Access to information

- Patient records were accessible to all staff who worked at the clinic.
- Where patients required hospitalisation during their treatments, there was an agreement that their hospital records came to the clinic when they had their treatment. Information about the patient's treatment at the clinic was detailed in the hospital records and the clinic records. The sharing of records supported continuity of care for patients at both provider sites.
- We saw the clinic received copies of emergency services documentation.
- Discharge letters were sent to patients' GPs informing them about treatment and any after care. However patients were not routinely copied into these letters, and so did not know what information their GP was receiving.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- Discussion with staff evidenced a good understanding about their responsibilities with the regard to the Mental Capacity Act and associated Deprivation of Liberty Safeguards.
- Training about the Mental Capacity Act was incorporated into the centres safeguarding training.
- Written consent was gained from all patients prior to the commencement of treatment. Where children had

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capacity to understand their treatment, they signed to confirm they consented to treatment, with their legal guardian or parent countersigning the consent form. Consent forms were not carbonated, so patients did not automatically receive a copy. However, as part of the consent process patients were asked if they wanted a copy of the form and this was recorded on the form.

- Staff understood their responsibilities if a patient admitted was semi-conscious and did not have the full mental capacity to consent to treatment. They knew best interest decisions would need to be made after an assessment of the patient's mental capacity had been made and this needed to be documented. They also understood that as the patient's condition and capacity improved consent needed to be obtained for the continuation of treatment and that the patient had the right to refuse continuation of treatment.
- The centre had a policy on consent that was reviewed annually. This included detail about the Mental Capacity Act, associated Deprivation of Liberty Safeguards, processes for obtaining consent and processes to follow in the event of a patient not having capacity to consent to treatment.

Are hyperbaric therapy services caring?

By caring, we mean that staff involve and treat patients with compassion, kindness, dignity and respect.

Patients and relatives commented positively about the care provided from all staff, describing the care as "excellent." They said staff took consideration to protect their privacy and dignity.

Patients were fully involved in making decisions about their treatment, having full explanations about the proposed treatment and any associated risks explained to them.

Staff considered the emotional needs of patients. Patients expressed that staff made them feel at ease during the course of treatment. There was consideration of patients particular needs after treatment was finished. Staff ensured patients had transport to take them home or arranged accommodation at local guest houses to alleviate concerns with getting home during the night.

Compassionate care

- Patients spoke positively about the care and compassionate manner of all staff. One patient said "the quality of care was surprisingly excellent." All patients said the member of staff supporting them in the chamber was caring and they felt conformable with that member of staff.
- Responses from NHS quality monitoring survey for 2014 were 100% for the question "did the staff do all that they reasonably could to make you feel safe and secure in the hyperbaric unit?" and "do you feel that your human rights and diversity were respected while you were in the hyperbaric unit?"
- The clinic surveyed all patients after their treatment for their opinions about their experience of care and treatment. We viewed results of these surveys, all which were positive about the caring manner of all staff at the clinic. Comments included "couldn't fault the staff. They did all they could for me and did so generously and without hesitation," and "all the staff were extremely helpful and patient with me."
- Patients commented staff were sensitive in the manner they protected their privacy and dignity. The environment of the decompression chambers presented challenges with protecting privacy and dignity when patients needed to use toilet facilities. Patients said staff understood their anxieties; explaining the toileting facilities before they entered and commenced treatment the chamber. This included using a portable toilet facility in a separate area of the chamber. CCTV cameras monitored the whole of the chamber, but when a person was using toilet facilities these were occluded to promote privacy and dignity.

Understanding and involvement of patients and those close to them

- All patients we spoke with said they were fully informed about their condition, proposed treatment and were able to make informed decisions about having the treatment. One patient who was referred to the clinic by the centre they had been diving with said the Diver Clinic staff spoke directly with them by telephone about their signs and symptoms rather than the dive centre staff.

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- Feedback about information provided by doctors was positive. This included “no questions from me were needed as the doctor explained everything in detail,” and “the doctor was willing to listen to all my concerns.”
- All patients said staff provided additional information when they were in the chamber, ensuring they understood the treatment process at all times.
- Responses from NHS quality monitoring survey for 2014 were 100% for the questions “How good was the information you received about your condition and about the treatment that you were given in the hyperbaric unit?” and “Were you given enough information to allow you make decisions about your care and treatment?” One patient said “no questions from me were needed as the doctor explained everything in detail.”

Emotional support

- Patients commented positively about the emotional support provided by all staff during their treatment and after their treatment.
- A member of staff was present in the chamber at all times to monitor the patient’s wellbeing and provide support. Patients highly praised these staff. Comments included “excellent member of staff, he was brilliant.” We viewed feedback from patients receive at the clinic. Comments regarding emotional support included “made to feel at ease in an upsetting situation,” “X (member of staff) was fantastic and made me feel relaxed, but all staff were great,” and “X and X (members of staff) went out of their way to make sure my treatment was as pleasant as possible, not easy but it was appreciated.”
- Patients commented positively on the support given to their family members or the dive buddy that accompanied them to the clinic.
- Staff at the clinic explained how they considered the needs of patients after they had completed their treatment. Due to the nature and the timing that treatment generally commenced, most patients finished treatment in the early hours of the morning. Staff at the clinic ensured patients who lived nearby had someone who could drive them home, or if needed and for patients who lived further away staff

arranged accommodation at local guesthouses or hotels for patients and their families reducing any anxiety for patients once they had finished their treatment in the middle of the night. This practice was confirmed in conversations with patients.

- Staff explained that if any concerns were identified during treatment about a patient’s psychological well-being, this was identified in the discharge letter to the patient’s GP for them to follow up.
- The clinic had a practice of phoning patients a few days after treatment to check on their recovery and well-being. Patients confirmed they received phone calls from the clinic. Patient’s also told us they could phone the clinic at any time of day and night for advice and support.

Are hyperbaric therapy services responsive to people’s needs? (for example, to feedback?)

By responsive, we mean that services are organised so that they meet people’s needs.

The clinic provided a 24 hour, seven day on call emergency service with patients commencing treatment within two hours of referral. The service was patient-centred, and feedback was positively encouraged. Changes were made to the service in response to patient feedback in order to improve patient experience. A complaints policy was in place, but no complaints had been received since the service started operating.

Service planning and delivery to meet the needs of local people

- The clinic was commissioned by NHS England to provide emergency treatment for patients with decompression illness. Staff at the clinic had skills to provide hyperbaric treatment for other conditions such as carbon monoxide poisoning, but at the time of inspection NHS England was not commissioning that service in the local area.
- The unit was located near the coast and was able to respond promptly to diving emergencies.

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- At the time of inspection, the clinic, as a member of the British Hyperbaric Association, was working with the NHS England Clinical Reference Group, who were looking at how to organise hyperbaric services throughout England.
- The clinic had plans to develop the service and upgrade one of the chambers. However, until decisions were made by NHS England about how hyperbaric services were organised, there were no immediate plans to make any changes to the service.
- The clinic provided a 24 hour, seven day on call emergency service. The on call rota enabled two chambers to be used during busy periods. In exceptional circumstances if the clinic had reached full capacity contact with the National Advice Line would support referrers to identify clinics that had capacity to treat patients.
- At the time of inspection, all patients who received treatment at the centre were emergency treatments, so information about the service was not provided prior to the patient arriving at the clinic. However, the clinic provided information about their services to local diving centres. This included details of signs and symptoms of decompression illness with the aim of treatment being sought and provided before patient's conditions became critical.
- The clinic was commissioned to treat children who had diving accidents. In such circumstances the clinic liaised with the duty paediatric consultant at the local NHS acute hospital to ensure care and treatment was appropriate for the child.
- There were effective working relationships with the local NHS ambulance, air ambulance services and coastguard which meant when needed patients were transported to the clinic to commence their treatment in a timely manner.
- In the 12 months prior to the inspection, there had been no occasions when the clinic was not able to admit a referred patient for treatment.
- Discharge planning was commenced on admission or prior to admission to the clinic. Accommodation was arranged for patients and their family in local guesthouses, so they did not have to travel home in the middle of the night when they completed their treatment. All the hyperbaric doctors working at the clinic had admitting rights to the local NHS acute hospital. This meant there were no delays in admitting patients to hospital for ongoing treatment if they required it.

Access and flow

- Emergency access to the service was good. Staff could be called in and the unit opened within twenty minutes. Data reported to NHS England showed all treatments commenced within 2 hours of referral. This was confirmed in conversations with patients and staff.
- Referral to the clinic was made by diving organisations or individuals. We spoke with patients who had referred themselves and who had been referred by the diving centre they were diving with.
- Referral was initially made by contacting the on call supervisors. Both patients and diving centres said response from the on-call supervisor was within five minutes. The duty hyperbaric doctor made the decision about the ability of the clinic to successfully treat and meet the patient's known and anticipated needs.
- Due to the commissioning of the service, the clinic did not treat people with a significant learning disability or who had a dementia. This was because people with a learning disability or dementia would not pass the fitness to dive medical assessment. However, staff were aware of the needs to make reasonable adjustments to meet the needs of people with such conditions, if the service was commissioned to provide other services other than treatment of diving accidents.
- Staff spoke about how they communicated non-verbally with hand gestures and improvised sign language with patients who might have difficulty with speaking. This included all patients when they were wearing oxygen masks as part of their treatment.
- Translation services were accessible through the local acute NHS hospital. However, staff explained they had not had any patients with translation needs so the service had not been tested.

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- Disabled toilet facilities were available for patients and others who might require that facility.
- There was a transfer trolley to enable patients enter the chamber if they had difficulty walking.
- All treatment and waiting areas were on the ground floor, which made them accessible to patients, and people accompanying them, who had mobility problems.
- A choice of reading literature was available for patients to take into the chamber to occupy themselves whilst receiving treatment. Patients could choose radio stations to listen to whilst receiving treatment.
- On completion of the treatment, patients were given information leaflets explaining what to expect after treatment and recommendations about how long they should regard from diving. Details were provided so they could contact the clinic with any queries after discharge.

Learning from complaints and concerns

- The clinic's complaints policy described that complaints provided an opportunity to learn, adapt, improve and provide better services. It also gave clear timescales for investigating and responding to complaints.
- The clinic had received no complaints in the twelve months prior to the inspection. However they were able to demonstrate changes in practice and equipment were made in response to patient feedback. A variety of reading glasses had been purchased so patients could read whilst receiving treatment. Due to the length of time spent in the chamber, on top of the time patients had previously spent diving, the clinic had bought a variety of phone chargers so patients could charge their phones ready for use once they had completed treatment.

Are hyperbaric therapy services well-led?

By well-led, we mean that the leadership, management and governance of the organisation assure the delivery of high quality person-centred care, supports learning and innovation, and promotes an open and fair culture.

Strong clinical and professional leads were provided by the medical directors, managing director and the registered manager. All the members of the team with whom we spoke shared a strong commitment to providing the best possible service to patients which reflected the clinics stated mission. The quality of the service was monitored. Risks were assessed and action taken to reduce them. There was an open and honest culture. Feedback from patients and staff was encouraged and used to improve the quality of the service.

Vision and strategy for this this core service

- The mission statement from the centre's annual plan dated February 2015 detailed, "our mission is to provide first-class clinically effective hyperbaric care to patients for a range of approved conditions in an environment which is safe, comfortable and welcoming to patients, staff and visitors." Discussions with staff and patients evidenced working practices embraced the mission, with emphasis being placed on individualised care for patient's and support of their relatives.

Governance, risk management and quality measurement for this core service

- There was a structured governance programme for the treatment centre, which included Medical Advisory Committee (MAC) meetings and management meetings. Structured agendas ensured essential areas to the management of the service were discussed. This included NHS England and Clinical Reference Group update, review of patient feedback including any actions completed from previous period, review of complaints, review of adverse incidents, review of audits, Clinical Governance information, review of staffing and training needs and any other business. We reviewed records of the last three MAC meetings and management meetings which evidenced these items were discussed.
- Medical directors had different lead roles. One had lead roles for medical appraisals, paediatric and intensive care service provision. The other had lead roles for safeguarding, management of medicines,

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governance and quality monitoring of the service. Amongst many roles the registered manager had lead roles for the management of risks, health and safety and incident reporting.

- The service submitted data quarterly to NHS England for the Specialised Services Quality Dashboard related to the clinical reference group of Hyperbaric Oxygen Therapy.
- The clinic did not have a risk register, but had a folder of individual risk assessments of identified risks that were reviewed on an annual basis or more frequently if required. The assessments detailed actions taken to reduce the level of risk and reduce risk of harm to patients, staff and visitors. Review of risk assessments were a standing agenda item in MAC and management meetings which ensured they were considered on a regular basis.
- Policies and procedures were reviewed on an annual basis. Many policies were developed with the support of staff from the local NHS acute hospital. This resulted in some policies having guidance in them that was not relevant to the service provided at the clinic. For example, the infection control policy detailed procedures to be used when visiting patients' own homes which did not apply to this service. The registered manager said he would 'streamline' the policies to make them fully relevant to the service provided at the clinic.

Leadership and culture of service

- The medical directors, managing director and registered manager were established experts in hyperbaric medicine and in the operation of hyperbaric facilities respectively. They were both very visible and approachable, and were held in high regard by team members.
- We saw that there was a high level of trust and respect between members of the team. This had resulted in effective and supportive team working.
- There was an open and honest culture with staff ready to ask for and receive assistance when needed.
- Staff wellbeing was actively promoted, with an awareness of the risks involved, for example for staff who accompanied patients in the chamber. All staff exposed to altered pressure in the course of their work

were required to have medical checks before taking up their duties and these checks were repeated annually. Staff were offered opportunity to have a medical to check whether they had a patent foramen ovale. (This is a small opening between two chambers of the heart that does not usually cause health problems, but can be a contributory factor of decompression illness. Staff who had a patent foramen ovale would possibly have a higher risk of developing decompression illness whilst attending to patients in the chamber than staff who did not have this condition).

Public and staff engagement

- All patients were encouraged to complete a patient satisfaction survey form. The resulting data was collected and evaluated on a quarterly basis as part of the quality dashboard process.
- Staff contacted all patients by telephone after treatment to check on progress and capture any comments about the quality of the service.
- Feedback was also gathered during conversations patients had with staff whilst they were being treated.
- Staff said a full staff meeting was held once a year. Due to most staff having substantive posts elsewhere it was not possible to arrange regular staff meetings. However staff told us they could contact the registered manager at any time for advice or to put forward new ideas for the service. They said the registered manager kept them informed by email, text messages or phone calls regarding any changes in the running of the service. They all felt fully involved and informed.

Innovation, improvement and sustainability

- The registered manager was a member of the clinical reference group for hyperbaric oxygen therapy who are working closely with public health experts and commissioners in developing new clinical commissioning guidelines for the service.
- The managing director explained that despite the clinic only being commissioned to provide treatment for patients who required decompression therapy following diving incidents, the prevalence of those incidents meant there were no concerns with the sustainability of the service.

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- The service had plans to upgrade one of the chamber facilities, but until NHS England had made a final decision about how hyperbaric services were organised, there were no immediate plans to make any changes to the service.

Outstanding practice and areas for improvement

Areas for improvement

Action the provider **SHOULD** take to improve

- The provider should consider revising policies to make them fully relevant to the clinic's practices.
- The provider should consider copying patients into discharge letters sent to their GPs.