Quality Surveillance Programme

NHS England

Peer Review Visit Report

Commissioning Region	North Of England Commissioning Region
Commissioning Hub	NHS England North (Yorkshire And Humber)
Provider Organisation	Sheffield Children's NHS Foundation Trust
Peer Review Visit Date	18/Apr/2018

Compliance

Service	Self Declaration	Peer Review
Paediatric Intensive Care Retrieval (Transport)	100.0%	94.7%

Report Status

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Report Sections

Structure And Process

Sheffield Childrens Hospital NHS Foundation Trust (SCH) is one of four dedicated childrens hospital trusts in the UK and provides integrated healthcare for children and young people, including community and mental health care as well as acute and specialist services. The Trust hosts the Yorkshire and Humber Paediatric and Neonatal Intensive Care Transport Service which is provided by Embrace which was established in 2009. The team provides a highly specialist twenty four hour, seven days a week service for critically ill infants and children in Yorkshire and the Humber. The service is provided in conjunction with Yorkshire Ambulance Service NHS Trust (YAS).

The service is a stand-alone team based off site on a business park in Barnsley in a dedicated facility with limited space available for the service and with parking for four ambulances and one rapid response vehicle. There are sixteen district general hospitals (DGHs) and two paediatric intensive care units (PICUs) within the catchment area of Embrace; one in SCH and one in Leeds General Infirmary (LGI), with a population of 5.3 million. There are approximately 3,500 referrals per annum. Embrace provide a single point of contact for clinicians caring for infants and children for advice and transfers by road and air. The team are part of the Surgery & Critical Care Division within SCH.

There is a fully functional and funded Paediatric Critical Care (PCC) Operational Delivery Network (ODN) covering West Yorkshire, North Yorkshire, South Yorkshire, East Riding of Yorkshire, North Lincolnshire, North East Lincolnshire, North Derbyshire and Bassetlaw. Embrace are a constituent member of the ODN and participate on the Reference Group and Education and Training Group and are represented on the Executive Board. The scope of services provided including the catchment population and any normal inclusions or exclusions in terms of age and condition of children to be transferred has been agreed with the ODN. The PCC ODN is represented at the Embrace Reference Group which is chaired by a commissioner and provides oversight of Embrace.

Reviewers met with clinical representatives from the team, a deputy divisional manager, a representative from a PICU and a representative from the PCC ODN. The team appeared to be engaged and aware of the day to day service and the many different aspects of the services including the challenges and were engaged and empowered with good representation at the review.

There is a named lead consultant with an agreed list of responsibilities in his job plan including 12.5 programmed activities (PA) of which 10 are direct clinical care (DCC) for Embrace, 2 SPA and 0.5 PA for clinical leadership. In the coming year there will be 1 PA included in the clinical leads job plan for specialised Continual Professional Development (CPD). The lead clinicians responsibilities include staffing, training, guidelines and protocols, governance, liaison with other services for ground and air transport although these responsibilities are shared among other consultant colleagues overseen by the lead. The team were well led with a comprehensive and enthusiastic lead with commitment to the Embrace transport service. There is no direct clinical care (DCC) for the clinical lead for the parent specialty on the paediatric intensive care unit, which

was noted by the reviewers as being unusual for a consultant leading and undertaking paediatric intensive care transport and was identified as an area for improvement. All other transport consultants within Embrace have DCC in their parent specialty.

There is a named senior lead nurse with an agreed list of responsibilities which include staffing, training, guidelines and protocols, governance and liaison with other services for ground and air transport. Unfortunately, the lead nurse was not present at the review due to long term leave. However, there are cover arrangements in place. Reviewers were informed that there were some challenges in leading a combined neonatal and paediatric transport service when covering an area that is not your parent specialty. There are also challenges faced in covering regional and national meetings for both neonatal and paediatrics whilst managing the team on site.

There is a transfer policy in place which is available on the internet with all guidelines being stored electronically. Reviewers identified that there were guidelines available on the ODN website in addition to the Embrace Guidelines. The review team were informed that LGI have their own guidelines but also reference the ODN and Embrace guidance. The ODN and Embrace are hosted by the same Trust and therefore the process for reviewing and updating the guidelines are overseen by SCH which helps to streamline the process and reduce duplication. This policy is accessible by the DGHs who are able to access the document within their clinical setting via the internet. During training sessions Embrace take the opportunity to promote their website and during the induction programme within the DGH, accessing the guidelines are covered. The drug calculator is also available on the intranet.

There is a list of authorised staff for emergency transfers which were observed by the review panel. Short term sickness of transport team members is managed by using a messaging system with a good response from clinical staff to cover shifts as needed. There had been an issue with rates of pay, but it is understood that this has now been resolved. In the event that cover arrangements were not available the team would review the workload and reprioritise workload with the possibilities of declining a repatriation. If a clinical member of the team is allocated to administrative duties during gaps in the transport team they will change and work clinically with the additional flexibility of an ANP covering the nurse role.

There is a robust competency based training and education plan in place and available for both medical and nursing staff. All staff are using the national paediatric intensive care (PIC) passport. The competency of the medical staff is reviewed by the lead consultant. There are currently no opportunities for annual rotation of transport nurses onto one of the paediatric intensive care units (PICU) or for PICU nurses to rotate onto the transport team and this was identified as an area for improvement. Paediatric transport nurses do not provide cross cover for the neonatal service. There is an informal process where each transport nurse will have one office day which gives the opportunity to assess their training needs either in neonatal or paediatrics depending on their experience and knowledge and opportunities provided to address any gaps in knowledge. There is a good induction process with simulation opportunities which was reported to be carried out to a good standard. There is an education plan which was described as being comprehensive and is completed over a period of time to ensure that nurses can develop their skill set. There are six registrar posts with the ANPs being part of the middle grade rota. The ANP has the opportunity to spend time either on the PICU or within anaesthesia every six months to develop and maintain competency. There is a process in place for neonatology consultants to keep their competencies in paediatric care with opportunities to attend Cardiac catheterisation laboratories, or attending theatre sessions with opportunity to intubate children.

There are four transport teams available during the day and two teams available at night during the

winter. In the summer (six month period) there is one team available for both neonates and paediatrics between midnight and 7pm and this was identified as an area of improvement. However, there is a triage policy in place with advice being given to the referring team and supported remotely to ensure the risk is minimised. The process of staggered shifts to fit to the demands of the service and annualised leave was identified as good practice. There are separate rotas for the winter and summer months with the summer rota running from March to October and the winter rota running from October to March. Of the four teams available during the day, one team is led by a consultant, two teams are led by a Specialist Trainee or an Advanced Nurse Practitioner (ANP) and one team is nurse led. All teams have an allocated ambulance driver. The night team are available from 7pm until 8am seven days a week. Calls are triaged and are prioritised based on discussions between the referring clinician and the accepting clinician centred upon resources available locally and the level of expertise in the DGH. If there are any gaps in transport availability, other PCC transport teams may be contacted.

There is a structured handover protocol in place which is multidisciplinary including all staff members who use a handover prompt sheet which was identified as good practice. Handover takes place at 7.30am each day which is followed by a board review with all consultants attending if they are on shift. The handover is also used as a learning conversation and training if required. There are electronic facilities to support referrals and in transfer communication between referrers and Embrace.

There are service guidelines in place for staff fatigue, moving and handling, health and safety, restraint of equipment, patients staff and parents and infection control. Moving and handling and health and safety are completed as part of SCH Mandatory and Statutory Training (MaST). Staff fatigue is closely monitored using the electronic e-rostering tool which records shift over runs. Reviewers were informed that there are processes in place to manage potential long retrievals with the capability of flexibility due to the shift overlaps. Any overrun of more than two hours would automatically be subject to a case review but the majority of overruns were reported to be less than one hour.

The guidelines for infection control are very comprehensive with a good awareness from staff of the processes in place. There is a process to ensure that every piece of equipment is deep cleaned each week with a check list used on returning to base as well as a check list for each piece of equipment that has been deep cleaned and these are also included in the handover prompt and this is regularly audited. There is also an infection control follow up form in the event that a patient is retrospectively identified with an infection. This gives the team the opportunity to inform the DGH and ensure that the equipment or ambulance is appropriately cleaned. However, there is no facility in the building to separate dirty and clean equipment with insufficient space to clean equipment adequately. There is good staff awareness of the potential risk with processes in place and this is highlighted on the risk register. There are inadequate facilities for staff to wash their hands on return from retrieval in the loading bay and equipment cupboard which increases the risk of infection to both parents and staff and this was raised as a serious concern.

There are governance arrangements in place within Embrace to review cases and to feedback to staff with good systems to identify cases to be discussed both within Embrace and the ODN and this was identified as good practice. Each retrieval is reviewed by the consultant of the day from the previous 24 hours who will identify incidents for discussion within either Embrace or the ODN. A Datix report will be completed when required to ensure that there is a formal case review and there is a learning safety folder which staff are expected to review at the beginning of each day which is managed by an ANP who will discuss any issues with the link consultant for the DGH and will escalate to the ODN when required. There is a system in place for the two PICUs and DGHs

where there is a follow up call within 24 hours to discuss the progress of the patient and this gives the PICU or the DGH the opportunity to feedback to the team on the progress of the patient, any developments or incidents. There is a quarterly board meeting for the review of mortality and morbidity (M&M) which is attended by a representative from each DGH. Morbidity and mortality is discussed at the PCC ODN meeting and any themes that are identified are discussed as an opportunity for shared learning.

There is a formal local strategy for managing winter pressures with a meeting attended by commissioners and the ODN and a Yorkshire and Humber ODN surge escalation policy which Embrace links into. Staff demonstrated a good awareness of this policy and have flexed the service to meet the additional demand by switching the long day three shift moving onto the night team providing two teams during the night. There is an escalation policy which is used during the winter months and patients are prioritised according to the policy.

There are network agreed transfer guidelines which were of a high standard. There are regionally agreed front facing guidelines used by the transport team and by the DGH referring hospitals that are very good and hosted on the Embrace website. There is a governance process for these guidelines with annual Embrace review and every three years are reviewed by the SCH governance review. The Embrace guidelines are reviewed in the ODN Board meeting. In addition, there are ODN guidelines available on the ODN website. There is a good partnership working between Embrace and the ODN regarding education and governance, facilitated by the ODN being fully funded and established, and this was identified as good practice. However, there is the potential for improvement in bringing all the guidelines together with easy access to avoid confusion for service users and this was identified as an area for improvement.

There is a collaborative approach to education and training between Embrace and the ODN with a number of learning opportunities being provided by each organisation. The ODN is funded to provide education across the network. There are education opportunities for the nursing community supported by Embrace who provide simulation training such as stabilisation on site. The PCC transport service provides training and education to referring units within its network on the assessment, resuscitation, stabilisation and maintenance of critically ill and injured children prior to the arrival of the transport service. There is a designated consultant and ANP for each DGH who are provided with one multi professional training day in addition to four dedicated nurse education days per year. To ensure that the training provided meets the needs of the DGH, a scoping exercise is carried out to enable to bespoke education plan to be put in place. These are carried out either bi-monthly or quarterly depending on the need. There are currently two DGHs who are not participating in the education being offered and this is being addressed by the ODN.

The presence of a robust stakeholder group is aided by the presence of a well-funded and managed PCC (ODN), with good attendance from DGH representatives, a parent, representatives from Embrace and the PICU. There is a 2016/17 annual report summarising activity, compliance with quality standards and clinical outcomes and progress from the previous year which was made available at the time of the review.

There is a named lead for the air transport service with dedicated time available to carry out the role who was not present at the review. There are policies in place with IAS Medical and Air Alliance the provider of fixed wing air ambulance and with The Childrens Air Ambulance (TCAA), the provider of rotary wing air ambulance. All air transfers are triaged based on the agreed PICU and neonatal intensive care unit (NICU) national tasking guidelines which considers the logistics, the weather, whether there is a requirement to cross water or the time required for the retrieval. The decision to use either fixed wing or rotary aircraft is based on the time for retrieval with rotary

fight being used for a two hour transfer and fixed wing if the retrieval will take between three to four hours; with the majority of air transport being used by the neonatal service. There are two landing sites for rotary wing within close proximity of the service, with either Leeds Bradford or Doncaster airports being used for fixed wing which are approximately 25 to 60 minutes away depending on traffic. Parents are able to accompany their child on both modes of air transport. Reviewers sought clarification to the number of retrievals by air in relation to the geographic area which was covered by Embrace. The lead consultant clarified that there was a robust process for triaging air transfers and most of the transfers were for the neonatal service out of region.

All members of staff are trained for rotary flight with the exception of the specialist trainees and there is a small core team for fixed wing transfers. There is a record kept of the number of flights that staff have undertaken and the training completed by all staff. However, reviewers were informed that not all members of the team may be up to date with rotary flight training although this is monitored closely and the team work hard to maintain competency.

There is an agreed set of formal policies in place with aircraft providers with includes operating procedures, quality and safety systems.

Reviewers were informed that the three of the four ambulances are on the risk register due to them all being at the end of their functional life span and therefore need replacing together with inadequate facilities for the service and this has been on the risk register for the past three years.

Patient Experience

There are various information leaflets available for parents and families regarding the service provided by Embrace and following some work with the Patient Advice Liaison Service (PALS) these are now available in different languages specific to the local community and are usually given to families by the nurse soon after the team arrives at the referring unit. However, these information leaflets do not contain information regarding accommodation, car parking, directions or transport options and is identified as an area for improvement. There are however satellite navigation (sat navs) which are provided to parents which have been pre-programme with the postcodes of all the locations within Yorkshire and Humber. The clinical team members provide additional information including confirmation of destination when discussing clinical aspects with family later on in the transfer process.

There is an effective feedback mechanism in place for parents and children either via the Embrace website or questionnaires which are handed to parents and returned to the nursing staff. These are used to inform service improvement which was considered by the reviewers as good practice. As a result of the feedback received the information leaflets were produced in languages other than English and leaflets are now available for fixed wing and rotary transfers. There is not a formal process of feeding back to service users of the changes made as a result of feedback through methods such as You Said, We Did boards which is identified as an area for improvement.

Clinical Outcomes

The service is the fourth largest unit out of the 9 existing units across the country in terms of area covered but it serves the third smallest population under 1.0 million; that is 58 children per km2. The unit covers 12% of the total geographical area covered by transport teams and provides transport for 8% of the total paediatric population. The unit services 16 DGHs; 3rd smallest paediatric population covered.

The figures in this section have been obtained from the transport teams SSQD and questionnaire submissions.

For 2016/2017, EMBRACE received 3470 referrals (423 for paediatric intensive care) and provided 2106 transfers (excludes 786 repatriations, but includes neonatal, high and low dependency transfers), 299 of which were for paediatric intensive care, i.e. just under 71% of paediatric intensive care patients referred required a transfer within the EMBRACE scope of care.

Embrace reported a performance of 80% for departing the transport base within 30 minutes from the time of the referral (mobilisation time), which demonstrates good performance. The median mobilisation time was 17 minutes. During the review it was discussed that the mobilisation time starts from the decision time to time the team leave the base.

The transport carried out 133 high dependency and 82 low dependency transfers for paediatric critical care.

EMBRACE reported a performance of 95% for time to bedside under 180 minutes for unplanned transfers, making them the best performers for this indicator across the country.

The team reported a median total transfer time of 364 minutes.

There were twenty three transfers out of region during the winter of 2017, with none in the previous two years. The transfers out of region were attributed to intensive care unit capacity rather than transport capacity.

It was noted by the reviewers that the team has a long stabilisation time with at least one call back to the receiving unit.

NB: During the reviews of all nine PCC transport teams, it was noted that there was inconsistency between teams in how mobilisation time and time to bedside were recorded. It is recommended that this is reviewed with all units to ensure consistency.

Significant Achievements

Well led comprehensive and enthusiastic lead with commitment to the Embrace transport service.

The team appeared to be engaged and aware of the day to day service and the many different aspects of the services including the challenges and were engaged and empowered with good representation at the review.

Good process for getting feedback from parents and families

MDT handover protocol was excellent.

The governance processes in place within Embrace to review cases and to feedback to staff and good systems in place to identify cases to be discussed both in Embrace and the ODN.

The link nurse and consultant at regular outreach training and education sessions to DGH.

There is a good partnership working between Embrace and the ODN regarding education and governance facilitated by the ODN being fully funded and established.

The process of staggered shifts to fit to the demands of the service and annualised leave.

Immediate Risks

No immediate risks logged

Serious Concerns

There is no facility in the building to separate dirty and clean equipment with insufficient space to clean equipment adequately. However, there is good staff awareness of the potential risk with processes in place and this is highlighted on the risk register. There are inadequate facilities for staff to wash their hands on return from retrieval in the loading bay and equipment cupboard which increases the risk of infection to both parents and staff.

Trust response: A short term and long term plan has been provided by the Trust in response to the serious concern identified.

Short term action: Investigate temporary screening measure - update required from Estates. Investigate new table in cleaning area, possible tape line to denote clean and dirty areas.

Long term action: Break clause in rental contract September 2019. Initial meeting with Estates team took place on 02/05. Estates lead to discuss with landlord possible modification / extension of current premises to meet requirements. If this is not viable new premises will be considered

Short term action: Risk assessment to be completed. Use of disabled toilet in garage area as handwashing area for staff. New signage to alert staff. Hand gel dispenser in equipment room.

Long term action: Break clause in rental contract September 2019. Initial meeting with Estates team took place on 02/05. Estates lead to discuss with landlord possible modification / extension of current premises to meet requirements. If this is not viable new premises will be considered.

Areas Of Improvement

There are no opportunities for rotation for nursing staff across the PICU or transport services.

There is the potential for improvement in bringing all the guidelines together with easy access to avoid confusion for service users.

The lead consultant does not undertake DCC in their parent specialty of Paediatric Intensive Care. The panel recommends all consultants maintain their competencies in their parent speciality.

Information leaflets should include information regarding accommodation, parking, transport options or directions.

There should be a formal process for feeding back to service users on changes made as a result of feedback received.