Care of Critically Ill & Critically Injured Children in the West Midlands

University Hospitals Coventry & Warwickshire NHS Trust
Visit Date: 4th December 2013  Report Date: April 2014

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INTRODUCTION

This report presents the findings of the review of the Care of Critically Ill and Critically Injured Children at University Hospitals Coventry and Warwickshire NHS Trust which took place on 4th December 2013. The purpose of the visit was to review compliance with West Midlands Quality Review Service (WMQRS) Quality Standards for:

- Care of Critically Ill and Critically Injured Children in the West Midlands, Version 4, March 2013

The aim of the standards and the review programme is to help providers and commissioners of services to improve clinical outcomes and service users’ and carers’ experiences by improving the quality of services. The report also gives external assurance of the care which can be used as part of organisations’ Quality Accounts. For commissioners, the report gives assurance of the quality of services commissioned and identifies areas where developments may be needed.

The report reflects the situation at the time of the visit. The text of this report identifies the main issues raised during the course of the visit. Appendix 1 lists the visiting team which reviewed the services at University Hospitals Coventry and Warwickshire NHS Trust. Appendix 2 contains the details of compliance with each of the standards and the percentage of standards met.

This report describes services provided or commissioned by the following organisations:

- University Hospitals Coventry and Warwickshire NHS Trust (UHCW)
- NHS Coventry and Rugby Clinical Commissioning Group

Most of the issues identified by quality reviews can be resolved by providers’ and commissioners’ own governance arrangements. Many can be tackled by the use of appropriate service improvement approaches; some require commissioner input. Individual organisations are responsible for taking action and monitoring this through their usual governance mechanisms. The lead commissioner for the service concerned is responsible for ensuring action plans are in place and monitoring their implementation liaising, as appropriate, with other commissioners, including commissioners of primary care. The lead commissioner in relation to this report is NHS Coventry and Rugby Clinical Commissioning Group.

ABOUT WEST MIDLANDS QUALITY REVIEW SERVICE

WMQRS is a collaborative venture by NHS organisations in the West Midlands to help improve the quality of health services by developing evidence-based Quality Standards, carrying out developmental and supportive quality reviews - often through peer review visits, producing comparative information on the quality of services and providing development and learning for all involved.

Expected outcomes are better quality, safety and clinical outcomes, better patient and carer experience, organisations with better information about the quality of clinical services, and organisations with more confidence and competence in reviewing the quality of clinical services. More detail about the work of WMQRS is available on www.wmqrs.nhs.uk

ACKNOWLEDGMENTS

West Midlands Quality Review Service would like to thank the staff and service users and carers of University Hospitals Coventry and Warwickshire NHS Trust for their hard work in preparing for the review and for their kindness and helpfulness during the course of the visit. Thanks are also due to the visiting team and their employing organisations for the time and expertise they contributed to this review.
CARE OF CRITICALLY ILL AND CRITICALLY INJURED CHILDREN

TRUST-WIDE

General Comments and Achievements

Good team-working within and between services was evident throughout this review. All staff who reviewers met were committed to working together to provide high quality care for children.

Immediate Risks: No immediate risks were identified.

Concerns: No concerns were identified.

Further Consideration

1 Reviewers were told by some staff and assured by the Resuscitation Officer that all Health Care Assistants (HCAs) working with children had completed paediatric Basic Life Support training. This was not included in the competence matrix and so information about achievement was not easily available. It may be helpful to include HCA resuscitation training in the competence matrix so that this can be monitored easily.

2 Information about completion of child protection training was recorded in the Electronic Staff Records for individual members of staff. It was therefore not easy for managers to show evidence of training for all staff, in particular, medical staff. It may be helpful to review arrangements for monitoring completion of child protection training.

3 Parents and some staff mentioned that they would like improved arrangements for car parking passes for families of children who are in hospital for more than one day.

4 Nurses at Rugby Urgent Care Centre were expected to have APLS (Advanced Paediatric Life Support) training. Reviewers commented that this level of training was not necessary for the type of service provided. PLS (Paediatric Life Support) would be appropriate training for nurses working at the Rugby Urgent Care Centre.

5 A standard transfer policy was in use at the Rugby Minor Injuries Unit to cover the arrival of a critically ill or critically injured child but not all staff were aware of it.

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CHILDREN’S EMERGENCY DEPARTMENT

General Comments and Achievements

The Children’s Emergency Department was separate from adult services and approximately 32,000 children attended the Department each year. Good multi-disciplinary teamwork was evident. Reviewers were particularly impressed by the good recruitment of middle grade doctors. Training and competence records were clear and well organised.

Good work on extended nursing roles was taking place. One independent nurse practitioner was trained and a second was undertaking appropriate training. This initiative was being evaluated but initial results indicated that a significant proportion of child attendances could be seen by independent nurse practitioners.

Good Practice

1 Emergency Department consultants were on site at all times (24/7).

2 All band 6 and band 7 nurses had completed APLS training.

Immediate Risks: No immediate risks were identified.
Concerns

1 Medical Cover in the Children’s Emergency Department after 9.30pm

Reviewers were seriously concerned by medical cover for the Children’s Emergency Department at night. After 9.30pm the only doctor usually in the children’s department was a paediatric Tier 1 doctor. These doctors were in the department for only two or three weeks before moving to other duties. If additional medical support or advice was needed, a middle grade (or consultant) doctor from the adult Emergency Department or paediatric service would be called. Criteria were in place detailing children for whom the paediatric middle grade doctor should be called but the junior doctor in the Children’s Emergency Department could discharge children aged over six months without review by a more senior doctor. Reviewers considered that the level of training provided by such short placements and the supervision of these doctors after 9.30pm were insufficient.

2 Environment

Two aspects of the environment in the Children’s Emergency Department were of concern:

   a. The waiting room did not have a children’s play room and had only one toy. Reviewers were told that sometimes children waited outside because the waiting area was so small.

   b. The Observation Ward was separate from adult patients but was not separate from the rest of the Children’s Emergency Department. The Observation Ward was a six bedded bay for children needing extended observation and all facilities were shared with the Children’s Emergency Department. None of the parent facilities expected on an in-patient ward were available. Privacy and dignity for children and families was minimal. People in the waiting area and anyone passing through the Department could see into the Observation Ward. A curtain could be closed if a member of staff was in the Observation Ward but was usually kept open to allow appropriate observation of children and young people in the Ward.

3 Child Protection Training

Junior doctors in the Children’s Emergency Department did not all have the expected level of child protection training. Four of the 17 doctors had definitely not completed level 3 training; the information for five doctors was on their Electronic Staff Record and so could not be confirmed; information about four other doctors was not available and four had definitely completed appropriate training.

Further Consideration

1 A significant number of staff had completed their child protection training just before the review visit. It may be helpful to monitor completion regularly to ensure all staff are keeping their training up to date.

2 Two consultant posts were vacant at the time of the review and reviewers were told that the allocation of a consultant for the Children’s Emergency Department was not always possible when consultant staffing was low. If a consultant is not available then the issue of medical cover after 9.30pm may also be relevant at other times.

IN-PATIENT WARD AND HIGH DEPENDENCY UNIT

General Comments and Achievements

The environment on the in-patient ward and High Dependency Unit (HDU) was excellent. Reviewers were particularly impressed by the indoor and outdoor play rooms. The environment was very child-friendly with a good range of toys available. Team-work within the service was good and a strong commitment to training and staff development was evident.
Good Practice

1 Five play specialists provided seven day a week cover. One of the play specialists carried a bleep and if any other area (for example, the Children’s Emergency Department) needed extra support then the play specialist would be bleeped.

2 The HDU had a good level of staffing by nurses with appropriate training. Staffing levels could be easily flexed depending on the number of children in the unit. All relevant equipment was easily available and timely and responsive access to other medical specialties was in place. The unit had good escalation policies.

Immediate Risks: No immediate risks were identified.

Concerns:

1 Transfers from George Eliot Hospital

Children needing in-patient care were transferred from George Eliot Hospital to University Hospitals Coventry and Warwickshire and, after 10pm, the Children’s Assessment Unit at George Eliot Hospital was closed and so children needing paediatric assessment were transferred from the Emergency Department at George Eliot Hospital to UHCW. Reviewers were told that the decision to move a child was taken by a consultant at George Eliot Hospital, that transfers were usually undertaken by a private ambulance and that a nurse did not always accompany the child. Children transferred from George Eliot Hospital were met by a nurse who undertook an initial assessment, including a Paediatric Early Warning Score. Reviewers were concerned that a) the ‘paramedic’ in the ambulance may be an ambulance technician and may not have appropriate competences in the recognition of critical illness in children and b) no clear protocol governing the transfers was evident at UHCW. Although the decision to transfer a child is primarily the responsibility of George Eliot Hospital, the clinical consequences will be seen at UHCW and reviewers considered that UHCW therefore shared the responsibility for ensuring appropriate protocols, staff competences and audit arrangements were in place.

Further Consideration

1 Arrangements for storage of resuscitation drugs may benefit from review as at the time of the review they were not locked away. Reviewers commented that this arrangement differed from those in use in most other hospitals.

2 Reviewers considered that there was the opportunity to develop a service for children on long-term ventilation who need hospital admission.

3 Further work on the care of children with trauma may be helpful, especially looking at involvement of general surgeons after the child has arrived on the paediatric ward. Reviewers were told that orthopaedic surgeons responded quickly but that the response from other surgical specialties was not always as quick or as confident.

PAEDIATRIC ANAESTHESIA AND DAY SURGERY UNIT

General Comments and Achievements

Paediatric anaesthetic services were very supportive of the care of children. Reviewers were impressed that a separate paediatric anaesthetist was identified to give advice to the consultant on call about the care of children (although see ‘further consideration 2’ below). The arrangement for getting paediatric advice appeared to work well and good escalation arrangements were in place.
Paediatric anaesthesia services were well-organised (with the exception of equipment – see below). A separate rota of Operating Department Practitioners covered the Children’s Emergency Department with staff rotating into the Emergency Department for five weeks.

**Good Practice**

1. Good information leaflets for children were available which were clear and well-presented.
2. A good children’s day case unit was available with a separate play area.

**Immediate Risks:** No immediate risks were identified.

**Concerns**

1. **Checking of Resuscitation Trolleys**
   
   New arrangements for monitoring checking of resuscitation and cardiac arrest trolleys in main and day case theatres were introduced at the time of the review. The Trust should keep these under regular review until it is assured that checking is robust.

2. **Management of Acute Pain**
   
   Guidelines on the management of acute pain were not in the Trust format. The guidelines included the use of codeine although this had been withdrawn nationally. The guidelines were not clear about duties and responsibilities, in particular whose duty it was to prescribe and deliver pain relief. The Nurse Controlled Analgesia policy was not in the Trust format but had been in use for eight weeks prior to the review.

3. **Separation from adult patients**
   
   Children were not separate from adult patients in two areas:
   
   a. Both children and adults were in the holding bay in main theatres prior to going down to theatre and the recovery area in theatres was not particularly child friendly.
   
   b. Reception in day case area was used for both children and adult patients. Reviewers were told that children could wait up for up to 15 minutes in this area.

**Further Consideration**

1. Reviewers suggested that separation of children from adult patients could be achieved relatively easily by not using the holding bay for children and by taking children through into the children’s day case unit more quickly.

2. The paediatric rota with a consultant available 24/7 was an impressive achievement. In practice, however, between 8am and 6pm the paediatric consultant could be in theatre. A second anaesthetist was supposed to be available in the event of the paediatric consultant being required for the care of a critically ill child but this did not always happen. Robust arrangements for providing cover for the paediatric anaesthetist between 8am and 6pm are needed if the paediatric rota is to work as envisaged. (NB. The anaesthetist providing cover would not need to be a paediatric anaesthetist.)

3. Relatively little pre-operative anaesthetic assessment for children was undertaken. Reviewers were told that this was in place for ophthalmology and in the policy for orthopaedics but was not usually implemented. Reviewers suggested that the introduction of systematic anaesthetic pre-assessment in all specialties should be considered.

4. The lead paediatric anaesthetist was not involved in the theatre users group. Greater participation with this group may be helpful in driving improvements in the care of children.
# Appendix 1 Membership of Visiting Team

## Executive Leads

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Trust/Trust Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Rose Johnson</td>
<td>Consultant in Emergency Medicine</td>
<td>Worcestershire Acute Hospitals NHS Trust</td>
</tr>
<tr>
<td>Dr Fiona Reynolds</td>
<td>Consultant Intensivist / Deputy Chief Medical Officer</td>
<td>Birmingham Children’s Hospital NHS Foundation Trust</td>
</tr>
</tbody>
</table>

## Visiting Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Trust/Trust Type</th>
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<tbody>
<tr>
<td>Dr Chrisantha Halahakoon</td>
<td>Consultant Paediatrician</td>
<td>The Royal Wolverhampton NHS Trust</td>
</tr>
<tr>
<td>Dr David Perks</td>
<td>Assistant Medical Director - Consultant Anaesthetist</td>
<td>The Dudley Group NHS Foundation Trust</td>
</tr>
<tr>
<td>Pamela Smith</td>
<td>Matron, Paediatrics &amp; Neonates</td>
<td>The Dudley Group NHS Foundation Trust</td>
</tr>
<tr>
<td>Kirsti Soanes</td>
<td>Consultant Nurse</td>
<td>Birmingham Children’s Hospital NHS Foundation Trust</td>
</tr>
<tr>
<td>Jacqueline Venn</td>
<td>Sister CICU</td>
<td>University Hospital of North Staffordshire NHS Trust</td>
</tr>
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## WMQRS Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Trust/Trust Type</th>
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<tbody>
<tr>
<td>Jane Eminson</td>
<td>Acting Director</td>
<td>West Midlands Quality Review Service</td>
</tr>
<tr>
<td>Sue McIlidowie</td>
<td>Quality Manager</td>
<td>West Midlands Quality Review Service</td>
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APPENDIX 2 COMPLIANCE WITH THE QUALITY STANDARDS

Analyses of percentage compliance with the Quality Standards should be viewed with caution as they give the same weight to each of the Quality Standards. Also, the number of Quality Standards applicable to each service varied depending on the nature of the service provided. Percentage compliance also takes no account of ‘working towards’ a particular Quality Standard. Reviewers often comment that it is better to have a ‘No but’, where there is real commitment to achieving a particular standard, than a ‘Yes but’ – where a ‘box has been ticked’ but the commitment to implementation is lacking. With these caveats, table 1 summarises the percentage compliance for each of the services reviewed.

Table 1 - Percentage of Quality Standards met

Details of compliance with individual Quality Standards can be found in a separate document.

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of Applicable QS</th>
<th>Number of QS Met</th>
<th>% met</th>
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<tbody>
<tr>
<td>Care of Critically Ill and Critically Injured</td>
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<tr>
<td>Children’s Emergency Department</td>
<td>46</td>
<td>38</td>
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<td>In-patient Ward and High Dependency Unit</td>
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<td>Paediatric Anaesthesia</td>
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<tr>
<td>Total</td>
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<td>144</td>
<td>86</td>
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