QUALITY STANDARDS FOR THE CARE OF CRITICALLY ILL AND CRITICALLY INJURED CHILDREN

DRAFT QUALITY STANDARDS – COMMENTS PRO-FORMA

Comments on these draft Quality Standards should be sent to PICS on PICS@aagbi.org by 17th September 2015

Please remember that the draft Quality Standards describe services when guidance on best practice has been implemented. You are asked to comment on the Standards not on whether you meet them. Detailed comments on individual Standards are also welcomed.

1. Do the Standards cover the important aspects of the structure and process of services? Are any areas missing?

2. Standards aim for a balance between showing that national guidance has been implemented and allowing maximum flexibility for local implementation. Has this balance been achieved?

3. Are the Standards too prescriptive or too detailed at any point?

4. Are the Standards written in clear, unambiguous language?

5. Are the Standards achievable within five years by all appropriate service providers?

6. Is the ‘Demonstration of Compliance’ box (located in the reference column) generally appropriate for showing that the Standard has been achieved?

7. Any other comments:
Please provide comments on the draft document. Please note the section number.

<table>
<thead>
<tr>
<th>Draft section number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>L3-202</td>
<td>ICTPICM no longer exists it is now the RCPCH Intercollegiate PICMSAC.</td>
</tr>
<tr>
<td>HW202</td>
<td>No lead for ED mentioned although leads for all other areas. We feel that these standards are very comprehensive and accessible; however, there needs to be clarity about the reality of assessment against standards, how this fits in with regulatory authorities and visits and the consequences of non-compliance with standards for this to be more than a wish list of best practice. Clinical lead in palliative care should also be identified. Increasing proportion of children cared for in PICU have long terms conditions and are receiving palliative and care directed treatment at the same time.</td>
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</tbody>
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Answers to the questions asked on first page

Q1. Do the Standards cover the important aspects of the structure and process of services? Are any areas missing?

In general the standards are comprehensive and good. The main problem lies with the definition of the levels of critical care which appear to be those for a tertiary paediatric centre. As they stand the levels of care are neither achievable nor safe in a district general hospital delivering level 1 or level 2 PCC.

Is the service provision for babies just over the neonatal age threshold, articulated so that it is very clear to commissioners and providers who is in charge and where the baby or YP is assessed and managed. With respect to CAMHS are there any recommendations in the
recent publication Future in Mind which need to be taken into account. Would it be possible to develop QS for 16 – 18 year olds as there have been examples of deaths of young people because of lack of accountability and lack of clarity as to where the YP should be managed.

<table>
<thead>
<tr>
<th>Questions asked on first page</th>
<th>Answers to the questions asked on first page</th>
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<tbody>
<tr>
<td>Q2. Standards aim for a balance between showing that national guidance has been implemented and allowing maximum flexibility for local implementation. Has this balance been achieved?</td>
<td>Yes, good balance.</td>
</tr>
<tr>
<td>Q3. Are the Standards too prescriptive or too detailed at any point?</td>
<td>No.</td>
</tr>
<tr>
<td>Q4. Are the Standards written in clear, unambiguous language?</td>
<td>The levels of critical care are not clear enough. They are clear if you are delivering care in a level 3 hospital, but not clear that this must also apply to DGH, where we feel the levels are inappropriate.</td>
</tr>
<tr>
<td>Q5. Are the Standards achievable within five years by all appropriate service providers?</td>
<td>Yes. Probably not unless there is a decision by Commissioners (both CCG and NHSE Specialist Commissioners) to meet this target</td>
</tr>
<tr>
<td>Q6. Is the ‘Demonstration of Compliance’ box (located in the reference column) generally appropriate for showing that the Standard has been achieved?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**One set of standards for all paediatrics**

- There should be one set of standards against which all paediatric care, whatever level of care is delivered, is measured.
- This should be in one document that can be reviewed/revised when needed (e.g. 2-5 yearly).
- Specialist nurses and doctors from each area should be allocated the area of specialty to revise.
- These standards should function as the “encyclopaedia” or “bible” of paediatric care.
- Currently there are standards, definitions and guidance available in at least 3 or 4 documents, which is unnecessary extra reading and duplication of work at source. They are all very slightly different which makes it confusing for users as to which document guidance they should follow.
- These standards should be those against which services are evaluated and to which services are commissioned.

**Levels of care in draft quality standards are unrealistic and unsafe, and some are retrogressive**

- The standards and suggestions for levels of care in this document would be absolutely fine in a tertiary paediatric hospital where the wards (level 1 and level 2) were in the same building as the level 3 (for support and immediate re-evaluation of children).
- As they stand at present, some of the suggested levels are dangerous and others are a backwards step. They do not accurately reflect what would be safe and good to deliver in a district general hospital setting, and most intensivists would not leave some of these children described in this document in a level 1 or level 2 setting in a DGH.
- **Pg 8: Level 1 should include CPAP/respiratory support (optiflow/vapotherm etc.) for bronchiolitis in <1 year olds.** All paediatric inpatient units should deliver this as minimum to alleviate bed pressure in winter and avoid transfers of children from level 1 to level 2. Currently many units in South East deliver this as to now state this should be level 2 would be retrogressive (because acc to this doc they do not even meet level 1 in some areas).
- **Pg8: Level 1 should not include IV anti-arrhythmic infusions.** This suggests we have children on amiodarone and flecainide in a DGH level 1.
- **Pg8: Level 1: Reduced level of consciousness <12 to stay in DGH level 1.** This is too nonspecific and as it stands, dangerous. If a child is post ictal with an improving level of consciousness, then fine, but just a depressed LOC <12 - no idea whether stable or falling. No specialist input as to cause - not safe.
- **Pg9: Level 2: Breathing.** Respiratory support on CPAP/ optiflow/vapotherm for...
bronchiolitis should all be level 1. For older children, non-invasive ventilation (CPAP/BiPAP) should be level 2. If we make all resp support level 2 there will be huge cost implications and a huge number of children transferred from multiple level 1 units to few level 2 units.

- **Pg 9**: Care of tracheostomy in the first 7 days? We feel this is unsafe, but fine to go to ward level 2 in tertiary institution within that week.
- **Pg 9**: Level 2. Resusc volume >80ml. Too nonspecific. Does this mean the child is fully resuscitated after 80ml/kg? This should state child can stay only if fully resuscitated after 80ml/kg…and why does this child need level 2. Why not level 1 critical care monitoring overnight. This is what normally happens at a DGH. Child is well resuscitated with volume and stays locally. According to this guidance child will now have to be transferred to level 2 unit. Unnecessary and unsafe.
- **Pg 9**: Circulation. Do we really expect DGH level 2 to keep shocked children requiring large volume resusc, vasoactive infusions and temporary external pacing? I would want this child in the PICU. This standard is not safe.
- **Pg 9**: Diagnosis and monitoring. All these standards would be absolutely fine in a level 2 area in the wards in a tertiary paediatric centre in say renal or neur HDU area, but to think that any DGH level 2 will be able to provide acute CVVH, or keep status on continuous infusions without immediate recourse to ventilation is unrealistic and unsafe.
- **Pg 9**: Intracranial monitoring or external ventricular drains should only be managed in a level 2 unit within a tertiary institution. This is not the case for a level 2 critical care DGH.
- **Pg 11**: Level 1 should not require a fixed area. There is no special equipment required only a monitor and the appropriate nursing ratio. To limit level 1 critical care to a specific area will be very limiting because in winter, once that area (1 or 2 beds maybe 4) is full there will be no more capacity for any other sick children. Level 1 critical care is about level of human and electronic monitoring, correct evaluation and assessment and responsive treatment. Current standard. Restrictive and retrogressive

These standards in general are good; however, the levels of care are unrealistic to apply in any other setting, other than a tertiary paediatric centre.

If the guidelines are to be applied to all paediatric critical care delivery according to the “Time to move on” nomenclature, then we have to be much more specific about what is delivered in a DGH setting level 1 and level 2, and what is delivered in a tertiary setting—levels 1-4.

A group was set up in London, chaired by Dr Duncan Macrae, to look at inequality of HDU delivery in Greater London. This group has set out very specifically what we as paediatricians, paediatric nurses and paediatric intensivists would suggest are good, safe, attainable standards of care for critical care (level 1 and level 2) delivered from a DGH perspective.

<table>
<thead>
<tr>
<th>Overall comments</th>
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<tr>
<td>These standards in general are good; however, the levels of care are unrealistic to apply in any other setting, other than a tertiary paediatric centre. There are some amendments as a group suggested in this response that we feel would add clarity (especially from a DGH perspective) if included within the final standards you will be publishing.</td>
</tr>
</tbody>
</table>

**One set of standards for all paediatrics**

There should be one set of standards against which all paediatric care, whatever level of care is delivered, is measured.

This should be in one document that can be reviewed / revised when needed (2-5 yearly). Specialist nurses and doctors from each area should be allocated the area of specialty to revise. These standards should function as the “encyclopaedia” or “bible” of paediatric care.

Currently there are standards, definitions and guidance available in at least 3 or 4 documents, which is unnecessary extra reading and duplication of work at source. They are all very slightly different which makes it confusing for users as to which document guidance
they should follow.

These standards should be those against which services are evaluated and to which services are commissioned.

Levels of care in draft quality standards are unrealistic and unsafe, and some are retrogressive

The standards and suggestions for levels of care in this document would be absolutely fine in a tertiary paediatric hospital where the wards (level 1 and level 2) were in the same building as the level 3 (for support and immediate re-evaluation of children). As they stand at present, some of the suggested levels could be described as dangerous and others a backwards step. They do not accurately reflect what would be safe and good to deliver in a district general hospital setting, and most intensivists would not leave some of these children described in this document in a level 1 or level 2 setting in a DGH.

If the guidelines are to be applied to all paediatric critical care delivery according to the “Time to move on” nomenclature, then we have to be much more specific about what is delivered in a DGH setting level 1 and level 2, and what is delivered in a tertiary setting - levels 1-4

Networks

There is nothing meaningful in these quality standards about networking and in particular nothing about L3 PCCU providing educational support to L1 and L2 PCCU. L3 PCCU could play a huge role in educating staff and helping to maintain skills within their network. Formal Critical Care networks should be established as stated within ‘Time to move on’.

London Standards for Critical Care within a DGH setting

The London CYP Critical Care Pathway Group, established under the London Strategic Clinical Network and now part of the Healthy London Partnership programme is chaired by Duncan Macrae. The group has paediatricians, paediatric critical care nurses and paediatric intensivists as part of its membership. The group’s objective has been to look at inequality of HDU delivery in Greater London. Following a baseline information gathering exercise to understand more about the delivery of paediatric critical care in London, the a sub group, chaired by Giles Armstrong has developed a set of standards for critical care within a DGH setting. These standards will be consulted upon in the next month and responses will be reviewed by the group at the end of September, with the aim of publication shortly afterwards. We would be happy to share these standards for information (please contact andy.martin3@nhs.net)

Presumably this is an England focused document as ODNs and the Commissioning arrangements are England specific. There are number of other standards eg FTF/FTFCH have set a 5 year implementation plan, there are CHD standards recently approved by NHSE, 7 day standards about to be published by NHSE, there are RCS planned and unplanned paediatric surgical standards led by the CSF, Time to Move on, and we are reviewing the Intercollegiate EM standards 2016/17 - important to highlight that the RCPCH is working on how to bring all of these standards into one tool kit for e.g. Commissioners and other NHS service planners. Note also that Kirkup has recommended a review of paediatric services in remote and rural areas, and these PIC standards/Time to Move on will be crucial to this review – we could draw attention to this work which the College is currently undertaking. Remote areas are mentioned and we can ask our R&R group to comment. Also if there are other linked ODNs the commissioning arrangements need to align eg Neonatal, Paediatric trauma.

Excellent document, easy to follow and very timely. Can also highlight the importance of an outcomes driven NHS culture eg NHS Outcomes Framework and CYPHOF, and the importance of clinical networked models. Excellent to see an ODN section.
Scope - The document refers to age range 0 to 16. Technically that includes all preterm babies, to whom quite a chunk of this does apply, but not always in the way stated. I might have missed a phrase making an exception for prematurity on my read through.

Transition - There is little mention of moving from NICU to PICU. This is not uncommon and becoming commoner as the NICU are moving babies on who are 44 weeks corrected for their prematurity.

### Terminology

**Page 7**

For information, The RCPCH is examining in its 2015 census whether paediatricians have joint responsibility for surgical patients with the surgeon in charge – this standard will help to drive this forward.

**Page 8 - 11**

**L1 PCCU**

The London CYP Critical Care Pathway Group has agreed within their draft standards that a L1 PCCU should be able to ‘deliver CPAP / Nasal high flow (optiflow or equivalent) for the support of children with respiratory disease (<2 years)’ and a L2 PCCU should be able to provide ‘Acute non-invasive ventilation (BiPAP) and CPAP for CYP (≥ 2 years)’.

23 of the 32 hospitals (72%) who responded to the baseline information gathering questionnaire said they provide CPAP. Of these hospitals 60% are L1 PCCU. Many other L1 PCCU in the South East are also able to deliver CPAP. If 60% of L1 PCCU in London are providing CPAP we really should be expecting all L1 PCCU to provide it in the future to reduce variability. To state this should only be provided in a L2 PCCU would be retrogressive. All paediatric inpatient units should deliver as minimum CPAP / Nasal high flow (optiflow or equivalent) for the support of children with respiratory disease (<2 years).

48% of the hospitals responded to say they provide BiPAP and only 4 of those hospitals (23%) are L1 PCCU. So as a group we agree that BiPAP should only be provided within a L2 PCCU.

L1 PCCU should not include IV anti-arrhythmic infusions. This suggests we have children on amiodarone and flecainide in a DGH level 1 which our group believes would be unsafe.

We do not believe that a reduced level of consciousness <12 patient could be treated within a DGH L1 PCCU environment. This is too non-specific and as it stands. If a child is post ictal with an improving level of consciousness, then fine, but just a depressed LOC <12 - no idea whether stable or falling. No specialist input as to cause and would not be safe.

The draft standards state that, “Level 1 PCCU and Level 2 PCCU must be able to provide tracheostomy care with no right of refusal provided there is network support for training and maintenance of skills in place. In absence of support from the network, Level 1 and Level 2 have the right to decline admission of a child with Tracheostomy. Trusts must support maintenance of skills.”

The draft standards also state that a L1 PCCU should be able to manage an unventilated child with tracheostomy (>7 days post procedure) and a L2 PCCU should be able to manage long term ventilated children (by mask or tracheostomy) including IV antibiotics.

The PICs draft quality standards suggest that care of tracheostomy in the first 7 days should be a L2 PCCU intervention. We deem this to be unsafe as the tracheostomy could be completed within a tertiary institution and discharged to a DGH L2 PCCU in the same week where they may not have the ability to manage. It would however be fine for a child in this situation to be admitted to a L2 PCCU within a tertiary institution within that week as they are more likely to have the skills to treat these patients.

L1 PCCU should not require a fixed area. There is no special equipment required only a monitor and the appropriate nursing ratio. To limit level 1 critical care to a specific area will be very limiting because in winter, once that area (1 or 2 beds maybe 4) is full there will be no more capacity for any other sick children. Level 1 critical care is about level of human and electronic monitoring, correct evaluation and assessment and responsive treatment. The
current draft standard is restrictive and retrogressive.

**L2 PCCU**

With the exception of long term ventilated patients, none of the conditions described in level 2 can be treated without the support of a significant paediatric sub-speciality team on site e.g. Renal, Liver, Neuro-surgery and Cardiac and most will need to be therefore de-facto delivered in specialist children’s hospitals. Enabling more critical care to be delivered outside a tertiary, especially in a level 2 PCCU (DGH) setting would free capacity for the level 3 PCCU.

**Resusc volume ≥80ml**

This is too non-specific. Does this mean the child is fully resuscitated after 80ml/kg and why does this child need Level 2? We suggest that this should state child can stay only if fully resuscitated after 80ml/kg and why could they not be a L1 PCCU intervention with monitoring overnight? This is what normally happens at a DGH. Child is well resuscitated with volume and stays locally. According to this guidance child will now have to be transferred to level 2 unit which as a group we deem unnecessary and unsafe.

**Circulation**

Do we really expect DGH level 2 to keep shocked children requiring large volume resusc, vasoactive infusions and temporary external pacing? We believe this standard is not safe and suggest that these children are provided care within a L3 PCCU.

**Diagnosis and monitoring**

All these standards would be absolutely fine in a level 2 area in the wards in a tertiary paediatric centre in say renal or neuro HDU area, but to think that any DGH level 2 will be able to provide acute CVVH, or keep status on continuous infusions without immediate recourse to ventilation is unrealistic and unsafe.

**Intracranial monitoring and external ventricular drains**

Intracranial monitoring or external ventricular drains should only be managed in a L2 PCCU within a tertiary institution not a DGH L2 PCCU.

<table>
<thead>
<tr>
<th>Page 13 – notes point 13</th>
<th>Local commissioners must note the need to embed the critical care standards for level 1 critical care into the emerging models for urgent and EM care, Vanguard sites etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P20 HW598</td>
<td>Worth expanding on consent? Any consent organisational operational policy should address CYP’s level of competency to consent independently, and must take into account e.g. any safeguarding, mental capacity or religious or cultural belief issues.</td>
</tr>
<tr>
<td>P33 ED601</td>
<td>Is this consultant paediatric and EM presence? Also in the revised FTF document, peak time is self-defined by the unit and not stipulated as always 5 – 10pm.</td>
</tr>
<tr>
<td>P48 IP 196</td>
<td>Check if aligned with FTFCH standards</td>
</tr>
<tr>
<td>P49 IP202</td>
<td>Note RCPCH quoted re EWTD and 10 + staff (in FTF there is a section which contains more information as to how staff/skill mix can make this number more flexible.</td>
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<tr>
<td></td>
<td>Does the consultant 30minute QS also apply to a consultant surgeon as well as a consultant paediatrician if the child is a surgical patient? – the CSF on behalf of the RCS is in the process of publishing quality standards for unplanned surgery and best to check the wording in this document.</td>
</tr>
<tr>
<td>P103 T401</td>
<td>Could telemedicine be included as desirable?</td>
</tr>
<tr>
<td>P110 DS202</td>
<td>? is this a surgeon, anaesthetist, or paediatrician or is the wording to cover the fact that anyone of them can do this?</td>
</tr>
<tr>
<td>P125 N701</td>
<td>By leaving level 1PCC as desirable to collect data be a concern or should there be a time frame added to this standard for level 1 PCC data collection systems to be in place? – it is important to push local commissioners to collect this data in the future.</td>
</tr>
<tr>
<td>ED 505, CA 505, IP 505, L1 505, L2 505, L3 505, N501</td>
<td>Add “guidelines on management of a child with an Advance Care Plan” There is much evidence that professionals are anxious about children with advance care plans. In addition local arrangements from storage and dissemination of plans needs to be available.</td>
</tr>
<tr>
<td>IP206, L1 206,</td>
<td>Add care of children who are dying and their families.</td>
</tr>
</tbody>
</table>
You may add extra rows as needed.

Please email this form to pics@aagbi.org by Thursday 17th September 2015.