

# Parents' and Carers' Impression of “Quality” within a Paediatric Emergency Department

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## Supporting Information

**Table A General ED Quality Assurance parameters**

<p><b>Workload</b></p> <p><i>Workload General</i></p> <ul style="list-style-type: none"><li>• Number of Presentations</li><li>• Number of patients who Did not wait (DNW) for treatment</li><li>• Number of Admissions</li></ul> <p><i>Workload Acuity</i></p> <ul style="list-style-type: none"><li>• Number &amp; percentage Triage Category 1 / 2 / 3 / 4 / 5</li><li>• Median time in resuscitation Area Triage Category 1&amp;2</li></ul> <p><i>Workload Timely Disposition</i></p> <ul style="list-style-type: none"><li>• Number &amp; percentage of presentation seen in &lt;4hrs</li><li>• Median time to disposition</li><li>• Triage Category 1 / 2 / 3 / 4 / 5<ul style="list-style-type: none"><li>○ Presentations seen in &lt;4hrs</li><li>○ Median time to be seen</li><li>○ Median time to disposition</li></ul></li></ul> <p><i>Workload Capacity</i></p> <ul style="list-style-type: none"><li>• Number of staff (nursing / physician/ allied health)</li><li>• Number of beds open (ED &amp; ED Observation)</li><li>• Median length of stay ( ED &amp; ED Observation)</li></ul>
<p><b>Patient Centred</b></p> <ul style="list-style-type: none"><li>• Percentage of patients who leave without been seen</li><li>• Customer feedback “Excellent/Very Good /Good”</li><li>• Discharge summary completed within 48hrs</li></ul>

- Median time to complete Discharge summary
- Time to be seen
- Time to initial Treatment, including analgesia
- Complaints

**Safety**

- Number of medication errors
- Handover related errors
- Treatment or investigation errors
- Child protection screening

**Effectiveness & Efficiency**

- Time to analgesia
- Representation to ED in 48hrs (excluding scheduled reviews)
- Representation to ED in 48hrs requiring admission (excluding scheduled reviews)

**Table B Disease Specific Quality Assurance measures**

<b>Quality Assurance Measure – Disease specific</b>
<p>Asthma</p> <ul style="list-style-type: none"><li>• Time to reliever treatment (<math>\beta_2</math> agonist/Ipratropium)</li><li>• Time to steroids (&gt;5yrs &amp; Moderate/Severe/Critical)</li><li>• % Patients received steroids</li><li>• % Patients received respiratory assessments/grading</li><li>• % Patients received second line agent</li><li>• % Patients received Ipratropium</li><li>• % Patients received Aminophylline / Magnesium Sulphate</li><li>• Discharged with Action plan &amp; Education</li><li>• Discharged with steroids</li><li>• Discharged with Preventer</li><li>• Discharged with follow-up</li><li>• Steroids given in &lt;5yrs and mild asthma</li><li>• Chest x-rays in acute asthma</li></ul>
<p>Bronchiolitis</p> <ul style="list-style-type: none"><li>• Total number of bronchiolitis presentations</li><li>• Dispositions admission/home/scheduled review/representations &lt;48hrs</li><li>• Number of chest x-rays</li></ul>
<p>Neonatal Sepsis / Meningitis</p> <ul style="list-style-type: none"><li>• Time to antibiotic administration</li><li>• Time to investigations</li><li>• Time to disposition</li></ul> <p>Severe Sepsis / Shock</p> <ul style="list-style-type: none"><li>• Time to IV/IO access</li><li>• Time to antibiotics administration</li><li>• Median time to fluid bolus</li><li>• % of patients requiring bolus given within 1hrs</li><li>• % of patients with refractory shock requiring inotrope</li></ul>

<ul style="list-style-type: none"> <li>• % of patients Initial blood glucose in 1 hr</li> </ul>
<p>Oncological Febrile Neutropenia</p> <ul style="list-style-type: none"> <li>• Time to investigations (FBE)</li> <li>• Time to Antibiotics</li> <li>• Time to disposition</li> </ul>
<p>Severe Head Injury</p> <ul style="list-style-type: none"> <li>• % of Patients without spinal precaution</li> <li>• % Patients with untreated hypotension</li> <li>• % Patients receiving neuro observations including BP</li> <li>• Median time to imaging from request</li> <li>• Median time to neurosurgeon response from request</li> <li>• % Needing definitive airway management</li> <li>• Median time to definitive airway management</li> </ul>
<p>Status Epilepticus</p> <ul style="list-style-type: none"> <li>• Time from arrival &amp; % of patients who received benzodiazepine</li> <li>• Time from arrival to second line anti-epileptics</li> <li>• % Patient &amp; Time to check initial blood glucose</li> <li>• % patient failure to achieve seizure control within 30mins</li> </ul>
<p>Diabetes Ketoacidosis (DKA)</p> <ul style="list-style-type: none"> <li>• % Patient received IV Normal saline</li> <li>• % Patient received appropriate insulin dose &amp; route</li> <li>• % patient received potassium replacement</li> <li>• % patient received IV insulin</li> <li>• % patient received bicarbonate</li> </ul>
<p>Anaphylaxis</p> <ul style="list-style-type: none"> <li>• % patients received adrenaline</li> <li>• % patient received adrenaline by appropriate route</li> </ul>
<p>Fractures Triage category 1 / 2 / 3</p> <p>Time to Analgesia in ED (include analgesia via Ambulance service)</p>

Table C Analysis of participant's impression of "Quality"

Commentary on best care/quality	No of responses	Percentage of Total (%)	Survey Two		Survey Three	
			% Likert Score Very Important (Score 7 - 9)	% Likert Score Extremely Important (Score 8 - 9)	% Likert Score Very Important (Score 7 - 9)	% Likert Score Extremely Important (Score 8 - 9)
Kind, caring and empathic staff who are friendly, courteous and compassionate	69	13.1%	94.2%	61.0%	89.3%	51.2%
• Caring & loving	18	3.4%				
• Friendly	17	3.2%				
• Kind	10	1.9%				
• Understanding	6	1.1%				
• Patient	5	1.0%				
• Compassionate	5	1.0%				
• Empathy	4	0.8%				
• Supportive	4	0.8%				
Timely management of children (assessment, diagnosis and treatment)	60	11.4%	95.0%	61.0%	96.5%	57.8%
Thorough and optimum medical assessment	56	10.6%	97.1%	80.7%	98.7%	84.3%
Staff should listen to and understand parents and have exceptional communication skills	45	8.6%	94.2%	51.0%	93.2%	55.4%
Staff should provide feedback & updates to carers/parents on the progress of care (investigations and treatments)	44	8.4%	97.1%	63.2%	98.7%	54.5%
Spacious / uncrowded environment waiting area and ED	42	8.0%	87.0%	45.4%	76.7%	35.4%
Explaining medical conditions, results and plans should be done in simple terms	39	7.4%	94.2%	54.3%	93.0%	53.5%
Experienced and knowledgeable staff	31	5.9%	97.1%	76.5%	100%	77.3%
Shorter wait times	29	5.5%	74.3%	33.3%	68.2%	32.1%
Tailored child friendly environment – waiting area and ED	25	4.8%	87.0%	49.3%	81.4%	42.1%
Clear follow up plans and reviews that are communicated and scheduled (Including ED, GP and Outpatients)	23	4.4%	99.5%	60.3%	95.4%	72.1%
Triage assessment should be performed in a timely manner	22	4.2%	100%	65.2%	95.4%	63.2%
Resources and equipment availability	20	3.8%	94.2%	73.2%	88.4%	72.1%
All staff behaving in a calm and professional manner that communicates to and supports each other	20	3.8%	97.1%	78.3%	91.0%	66.9%
More medical & nursing staff in the Emergency department to treat patients	18	3.4%	78.3%	55.1%	86.4%	52.3%
Timely review of patient to assess progress	15	2.9%	87.0%	58.0%	84.4%	49.8%
Provide an estimate on wait time and any updates while waiting	14	2.7%	78.3%	44.5%	75.0%	32.1%
Clean & hygienic environment / waiting area	13	2.5%	87.0%	45.4%	76.7%	35.4%

Timely access to sub specialised if needed	11	2.1%	<del>96.7%</del>	<del>61.0%</del>	<del>93.0%</del>	<del>61.0%</del>
Specialised nurses and doctors for children	11	2.1%	<del>97.4%</del>	<del>75.4%</del>	<del>100.0%</del>	<del>77.3%</del>
Review and check children while they are waiting	8	1.5%	<del>89.0%</del>	<del>62.3%</del>	<del>93.2%</del>	<del>61.4%</del>
Treating the sicker kids first	6	1.1%	<del>97.4%</del>	<del>80.7%</del>	<del>100.0%</del>	<del>79.1%</del>
Triage to provide initial care such as pain relief	5	1.0%	100%	<del>65.2%</del>	<del>95.4%</del>	<del>63.2%</del>
Minimal bureaucracy, repetition and administration	5	1.0%	<del>41.0%</del>	<del>20.3%</del>	<del>XX</del>	<del>XX</del>
Transfer of patients to other areas of hospital to happen quickly, smoothly and without repetition	5	1.0%	<del>87.0%</del>	<del>33.7%</del>	<del>86.0%</del>	<del>47.5%</del>
Communicate and update parents when there is a change in staff	3	0.6%	<del>78.9%</del>	<del>41.2%</del>	<del>72.1%</del>	<del>44.2%</del>
Medical Treatment followed	3	0.6%	<del>87.0%</del>	<del>57.5%</del>	<del>89.6%</del>	<del>61.4%</del>
Space for visitors in waiting area and treatment area	3	0.6%	<del>87.0%</del>	<del>49.3%</del>	<del>81.4%</del>	<del>42.9%</del>
Engage parents/carer in the care of the child	3	0.6%	<del>94.2%</del>	<del>61.0%</del>	<del>91.0%</del>	<del>52.3%</del>
Retain experienced and skilled paediatric staff	2	0.4%	<del>99.6%</del>	<del>78.3%</del>	<del>98.7%</del>	<del>68.5%</del>
No medical or nursing students	1	0.2%				
Parking spaces that are available and reasonably priced	1	0.2%				
Mobile reception in ED	1	0.2%				
Ease of access to complete medical records	1	0.2%				
Doing everything possible	1	0.2%				
Staff that skilled in non-English (Mandarin)	1	0.2%				
Evidence based	1	0.2%				
Name of staff easily seen	1	0.2%				
Outcomes/Safety/Stabilise *	1	0.2%				
Dedicated space for Autistic kids	1	0.2%				
* One word comments where context can't be determined						