

# REDUCE TIME FROM TRIAGE TO MD ASSESSMENT



**Editor’s Summary:** In *Reduce Time from Triage to MD Assessment*, the team at Alberta Children’s Hospital focused on children presenting to the emergency department ‘urgent’ emergency care as categorized through the Canadian Triage Assessment Standards. This group accounted for 50% of all patients presenting to the Emergency Department. Using techniques such as Six Sigma and Lean improvement methodologies, the group identified the need to shorten the time between nurse assessment and physician treatment in order to reduce the total length of time required to complete each case. Three zones were created within the emergency department based on patient acuity. This allowed provider teams to work together and reorganize equipment and physical space. The result was a 25% improvement in cycle time with no negative impact on other patients and a 29% improvement in consistency of the process.

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<b>Purpose:</b>	ACH ED was meeting the Paediatric Canadian Triage and Acuity Scale (PaedCTAS) guidelines for triage to MD assessment time 11% of the time for Urgent (PaedCTAS 3) patients in August 2007. This group of patients accounts for approximately 50% of the ED's total patient volume.
<b>Context:</b>	The project was chartered under the umbrella of GRIDLOCC (Getting Rid of Inappropriate Delays that Limit our Capacity to Care), a two-year project funded by the Alberta government's Wait Times Management Initiative. GRIDLOCC focuses on system redesign to reduce waiting times and overcrowding in Calgary’s Emergency Departments.

<b>Resources:</b>	Operating \$: ____ FTEs: __1.0FTE x 40 weeks (includes time of all project team members, project facilitator(s) and project sponsors)_____
<b>Source of resource:</b>	<input checked="" type="checkbox"/> <i>In kind</i> contributions from the organization <input type="checkbox"/> Dedicated internal funding <input checked="" type="checkbox"/> External funding (example grant, Ministry etc.)
<b>Population group:</b>	Urgent (PaedCTAS 3) paediatric patients presenting at the ACH ED.
<b>Patient flow entry and end points:</b>	Patient flow entry point: ED triage Patient flow end point: initial ED physician (MD) assessment
<b>Description/ approach:</b>	The team applied Lean Six Sigma improvement methodology to the triage to MD assessment process. Initial data demonstrated that the time from nurse to physician assessment was the largest contributor to the overall cycle time and that the physical layout of the department was impacting patient and provider flow. The team piloted two high impact changes:  1. Creation of three zones based on patient acuity to bring provider teams together  2. Reorganization of equipment and physical space to support the zone concept.
<b>Tools and tactics:</b>	The zoning concept resulted in:  • Assignment of dedicated MDs to each zone.  • Reallocation of interprofessional team members to support zones.  • Development of chair waiting areas within the ED for those patients waiting for results or reassessment who do not require a stretcher.
<b>Measurement approach:</b>	Cycle time (median and variation) from triage to MD assessment
<b>Impact/ evaluation:</b>	• Triage to MD assessment cycle time (median) improved by 25% for PaedCTAS 3 patients, with no negative impact on other patients  • Process variation improved by 29%
<b>Observation/ Discussion:</b>	Change management strategies were woven throughout all phases of this project and were instrumental to the project's success.

<b>Critical success factors/ lessons:</b>	<ul style="list-style-type: none"> <li>• Committed and visible leadership</li> <li>• Department culture of continuous improvement</li> <li>• Detailed plan for communication</li> <li>• Dedicated resources to support implementation</li> <li>• Clearly identified process owner (ED Patient Care Manager) who monitors measures regularly</li> <li>• Performance measures widely available in real-time web-based Statit PiMD system</li> <li>• Physician and staff engagement with data-driven methodology</li> </ul>
<b>Limiting factors:</b>	<p>Availability of inpatient bed capacity to match varying demand of patients requiring admission from the ED.</p>