

FOCUS on Emergency Departments: Technical Data Definitions and Data Sourcing^{1,2}

IDENTIFYING INFORMATION	
Name:	Patient time to see an emergency doctor
Calculation:	Patients' time to see an emergency doctor = (Physician initial assessment (PIA) time) - (Triage time) Metric: Median and 90 th percentile time in hours
Description:	<p>Triage time: The patient's first contact with a healthcare provider (triage nurse), regardless of whether or not the registration time is recorded prior to triage.³</p> <p>PIA time: The time captured in an information system when a physician indicates they will assess the patient.</p>
Data source:	National Ambulatory Care Reporting System (NACRS)
Assumptions:	None
Exclusions:	<ol style="list-style-type: none"> 1. Patients are excluded if either time stamp in the calculation is missing. 2. Patients are excluded if their recorded wait to see an emergency physician is greater than 72 hours (3 days) or a recognized data entry error occurred.⁴ 3. Results prior to the start of the 2016/17 fiscal year (prior to April 2016) are excluded at the Northern Lights Regional Health Centre and the Queen Elizabeth II Hospital due to concerns about the quality and reliability of the data during this time. Prior to 2016/17, less than 60% of the physician initial assessment time stamps were captured at these two sites, which was deemed too low for reliable public reporting by AHS. Due to efforts to improve this data capture, by April 2016 the data quality stabilized at a higher standard (85-90% captured), sufficient for reliable reporting. 4. Results from May and June 2016 are not reported for the Northern Lights Regional Health Centre due to the forest fire that affected Fort McMurray and forced the closure of the Northern Lights Regional Health Centre.

¹ Documentation and sourcing for the reported emergency department measures is the result of collaborative work between members of the HQCA's Health System Analytics team and members of AHS' Analytics team. Credit regarding determining the appropriate data definitions should be attributed to the AHS Analytics team for most of the measures below.

² While the HQCA used all reasonable efforts to ensure the accuracy, completeness, and reliability of the data used in this website, data continues to expand in scope and completeness. As such, the values reported may change over time.

³ This is the standard for both Alberta and CIHI.

⁴ E.g., if the patient's wait to see an emergency physician is less than 0 hours.

Limitations:	<ol style="list-style-type: none"> 1. Different emergency departments have varying degrees of electronic support for standardizing the assignment of the CTAS score. Therefore it is more valid to compare CTAS data over time within a single site rather than comparing sites. 2. The time of physician initial assessment (PIA) is a mandatory field in the NACRS database; however, this time is occasionally not recorded during a visit, resulting in some missing data. Overall, this amounts to less than 10% of the data at most of the emergency departments during the 2016/17 fiscal year, but there are exceptions.⁵ Data for the 2016/17 fiscal year is most complete. 3. Processes for physician sign up to see new patients may differ between sites. At some sites physicians may sign up for multiple patients at one time, especially for lower acuity cases. In this case, the data captured in the source information systems would differ from what actually happened. Some data systems capture this more reliably than others but overall the data is sufficiently consistent to make reliable comparisons. 4. For critically ill patients, where the focus is on life-saving patient care, the data for triage time and PIA may be recorded after the patient care is completed. Data irregularities introduced by this practice appear to occur consistently, suggesting a stable bias.⁶
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Alberta Health Services, Analytics. “Alberta Emergency Department (Urban) Operational & Performance Dashboard.” (2018) [Dashboard showing median and 90th percentile results for the length of time between when a patient arrives in the emergency department and when they first see a doctor for assessment, by facility, acuity (CTAS), month, and quarter]. *AHS Tableau Reporting Platform*. Retrieved from <https://tableau.ahs.ca>

⁵ See ‘Exclusions’ section for more information.

⁶ Any errors introduced by this practice are small and remain consistent over time.