

IDENTIFYING INFORMATION	
<b>Name:</b>	<b>Time to get X-ray completed</b>
<b>Calculation:</b>	Emergency department patients' time to get X-ray completed = (Test completion time <sup>21</sup> ) - (Imaging order time)  Metric: Median and 90 <sup>th</sup> percentile time in hours
<b>Description:</b>	<b>Imaging order time:</b> When a diagnostic imaging (DI) order for an X-ray is entered in a DI information system.  <b>Test completion time:</b> When the test (X-ray) has been completed and the images are made available to emergency department physicians.
<b>Data source:</b>	<b>Emergency department visits:</b> National Ambulatory Care Reporting System (NACRS)  <b>Diagnostic imaging:</b> Provincial DI data source, extracted from three information systems <ul style="list-style-type: none"> <li>▪ Millennium (Calgary)</li> <li>▪ Agfa (Edmonton)</li> <li>▪ Meditech (regional sites/rest of Alberta)</li> </ul>
<b>Assumptions:</b>	Data is comparable between the different diagnostic imaging information systems.
<b>Exclusions:</b>	Patients are excluded if: <ul style="list-style-type: none"> <li>▪ the time interval between when an imaging (X-ray) order is placed and when the test is completed is greater than 36 hours</li> <li>▪ either time stamp in the calculation is missing</li> <li>▪ a recognized data entry error occurred<sup>22</sup></li> </ul>
<b>Limitations:</b>	Some diagnostic imaging information systems may capture data more reliably than others, but overall the data is sufficiently consistent to make reliable comparisons.

Alberta Health Services, Analytics. "Alberta Emergency Visits and Related DI Orders -- Trend." (2018) [Dashboard showing median and 90<sup>th</sup> percentile results for the time from when an X-ray is ordered to when the X-ray is completed, by facility, month, and quarter]. *AHS Tableau Reporting Platform*. Retrieved from <https://tableau.ahs.ca>

<sup>21</sup> Test completion time was chosen as the final time stamp for this time interval because when an X-ray is completed the images are immediately made available to emergency department physicians. For the majority of general X-rays, emergency department physicians are able to make clinical decisions about their patients' care based on these images, without having to wait for an interpretation from the radiologist.

<sup>22</sup> E.g., if the patient's wait for X-ray results is less than 0 hours.