TECHNICAL BACKGROUNDER

RE: ER Provincial Summary Report – August 2022, Access to Care Analytics (Ontario Health)

This backgrounder provides an objective interpretation of the above-named report.

Access to Care Analytics is an Ontario Health (OH) agency that tracks and shares healthcare data. Their reports are issued to hospital executives and emergency department (ED) chiefs on a regular basis. The attached report provides an update on the status of emergency departments for the month of August 2022 and makes comparisons to historical data.

The following conclusions can be drawn from answers to the questions below and the report itself:

- Wait times, ED length of stay, time to inpatient bed and ambulance offload times in August were the worst they have ever been when compared to every other August since 2008. The trends generally suggest this year will continue to be record-breaking in the months to come.

- There has been no improvement in ED wait time performance or ambulance offload time compared to previous Augusts. In the vast number of cases, things have become considerably worse.

A note about statistics and percentiles:

Much of the data in the OH report is presented as a "90th percentile". This is a statistic that captures 90% of all values for a given metric. For example, if the 90th percentile for length of stay of admitted patients in an ER is 44.1 hours, it means that 90% of patients waited up to 44.1 hours to go to a hospital bed. Conversely, 10% of patients waited *longer* than 44.1 hours.

It is helpful to look at wait times in this way because the 90th percentile reveals the longest waits and the most dangerous scenarios. Average wait time is another measure that is publicly reported on the Ontario Health/Health Quality Ontario website. It shows similar trends where comparable data exists, though hides some of the more extreme values of patients with longer waits.
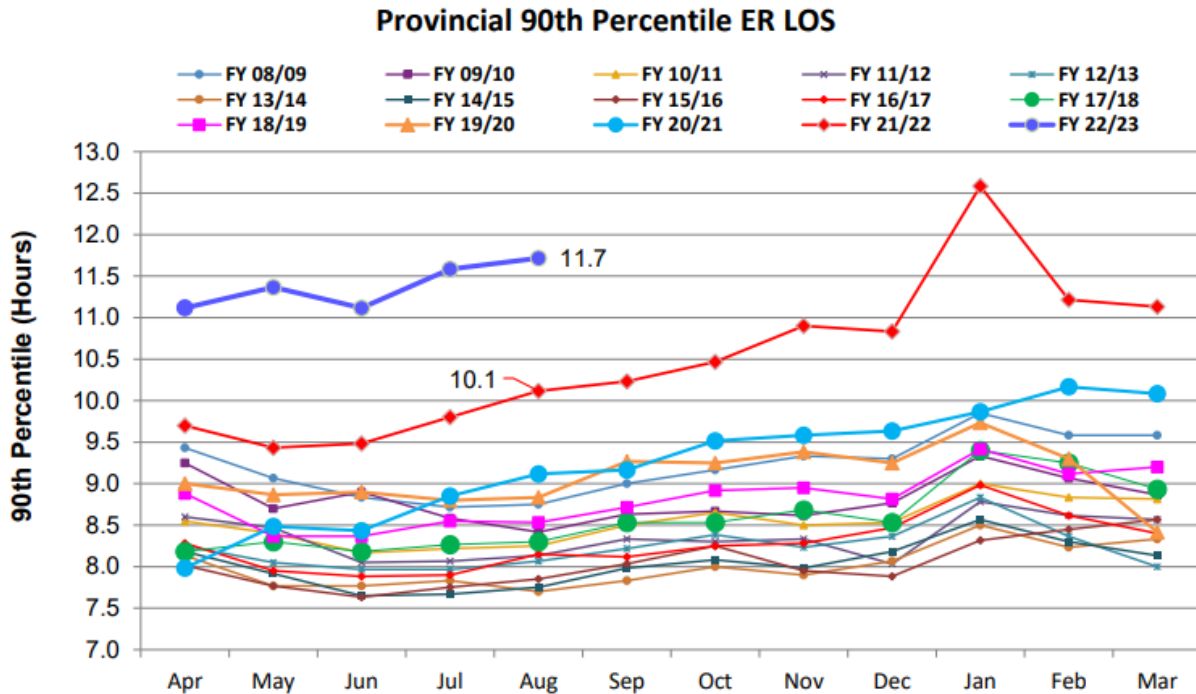
The data is compared on the basis of fiscal years.

The data

This report asks five questions:

1. Have there been improvements in ED wait time performance in Ontario?

No. The length of stay for all patients (90th percentile) in the emergency department has worsened by 15.8% compared to one year ago, and for patients in the ED who have been admitted but are waiting for a bed, it has worsened by 48.2% (their 90th percentile length of stay has increased to 44.1 hours). In fact, ER length of stay is the worst it has been since 2008/09.

Furthermore, wait times (for all severity) across the province have gone up by 4.2% despite the fact that ER volumes went down by approximately 10% compared to the August before. The drop in volumes was largely driven by low severity patients who came to the ER less frequently.
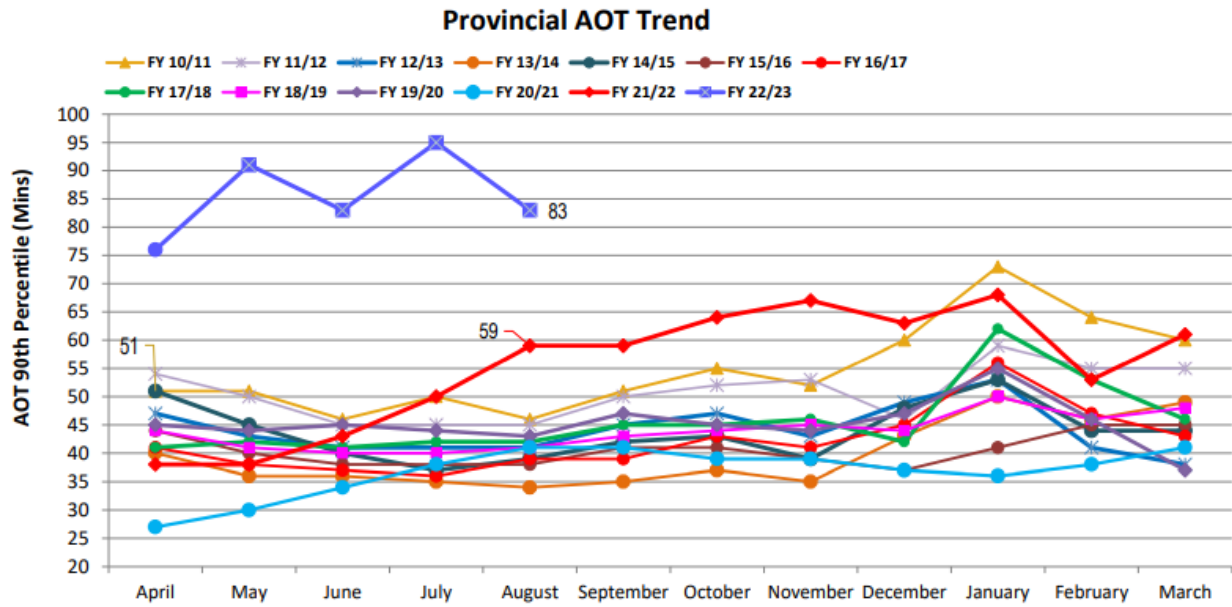
2. What is the variation in ER performance at the LHIN, hospital group and site level?

Out of the 14 Local Health Integration Networks (LHIN) across the province, *not a single one* had a length of stay less than eight hours when expressed as a 90th percentile. Furthermore, *none of the LHINs* showed any improvement in 90th percentile length of stay when compared with last year.

The few hospitals to show improvements were typically the ones with very low volumes to begin with.

3. Have there been improvements in Ambulance Offload Times (AOT)?

No. In August, ambulance offload times (90th percentile) increased by 40.7% compared to one year earlier. The 90th percentile AOT for August was 83 minutes. The trend for this year is dramatically worse compared with any other year in the past.

Provincial AOT Trend
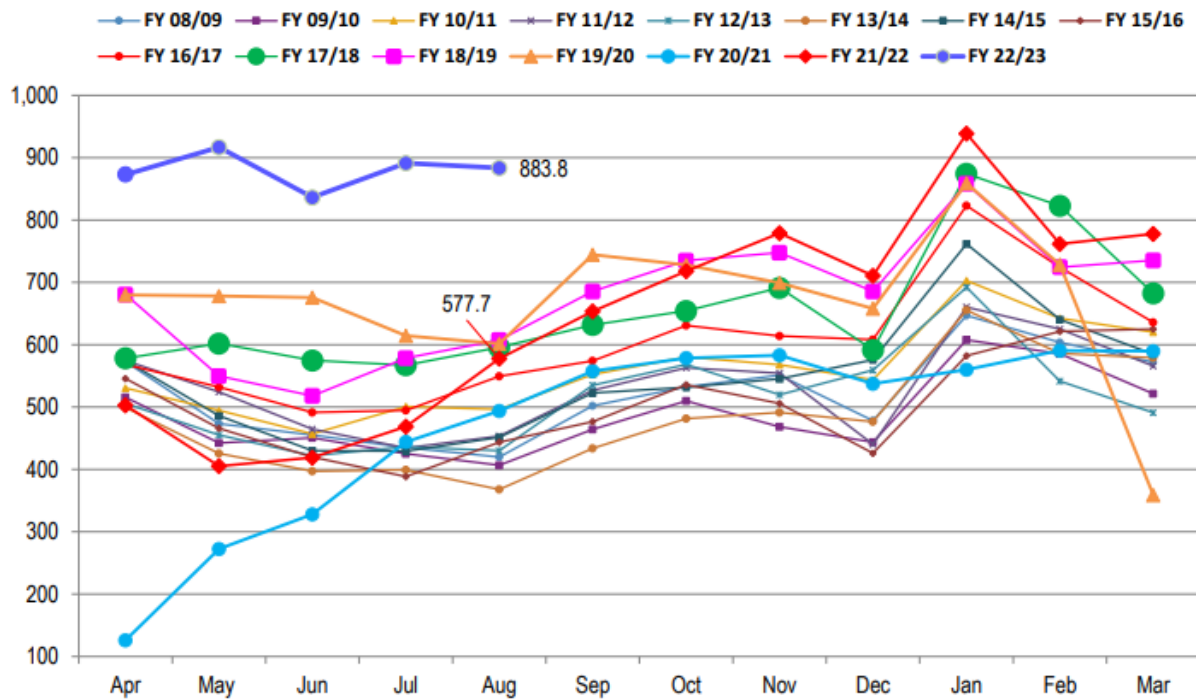
4. What factors are contributing most to ER Length of Stay?

Hospitals with a higher percentage of complex patients had a higher ER length of stay. ER length of stays went up even as volumes remained stable or came down.

5. What does the admitted patient population look like?

The average number of admitted patients waiting for an inpatient bed everyday across the province is 883.8 patients. This is an increase of 53% compared to one year ago. The trend this year is dramatically higher than last year.

Daily Average Number of Patients in ER Waiting for Inpt Bed at 8:00 AM [2]

The admission rate has not changed dramatically compared to one year ago (it increased by 0.6%). All 14 LHINs have an ALC rate greater than 10%. *The regions with the highest ALC rate do not seem to correlate with the ones that have the highest ED length of stay.*