The utilization of High flow oxygen devices has become first line treatment for COVID-19 patients experiencing respiratory distress with oxygenation issues. The ROX index score can be used to assist in the monitoring of these patients.

- Prediction tool used to monitor patients on high flow oxygen devices. Aids in the prediction of success or failure of high flow oxygen use.
- Evaluation of ROX index should be monitored for the first 12 hours. (2,6,12 hours of utilization)
- A value equal or greater than 4.88 in non-Covid patients has shown to be a prediction of success with high flow oxygen therapy.
- A trend of the score dropping is a potential sign of failure and consideration of a different mode of respiratory support should be considered.

How to Calculate ROX INDEX

\[ \text{SpO2/FiO2} \]

\[ \text{Respiratory Rate} \]

Example:

\[ \text{SpO2}: 90\% \; \text{FiO2}.70, \; \text{RR}= 30 \]

- \[ (90/0.7)=128.57 \]
- \[ 128.57/30= 4.28 \]
- Rox score is 4.28

Documenting ROX Index

- ROX index score will auto-calculate based on FiO2, Spo2, and respiratory rate being entered into the same column under the OXYGEN tab of EPIC.
- All three elements must be entered in order for the calculation to occur.
- Use as tool to evaluate discuss patients current respiratory status.
- Advance concerns of low ROX scores to critical care physician or EICU.

Reference: