

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 SpO2/FiO2 Respiratory Rate

## Example:

Spo2: 90% Fio2 .70, RR= 30

**>** (90/.7)=128.57

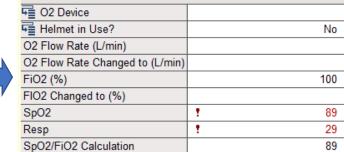
Oxygen Therapy/Pulse Ox

ROX Index (ROXi)

- **128.57/30=4.28**
- Rox score is 4.28

## **Documenting ROX Index**

- □ ROX index score will auto-calculate based on Fi02, 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.



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3.07



## Reference:

Roca O, Caralt B, Messika J, Samper M, Sztrymf B, Hernández G, García-de-Acilu M, Frat JP, Masclans JR, Ricard JD. An Index Combining Respiratory Rate and Oxygenation to Predict Outcome of Nasal High-Flow Therapy. Am J Respir Crit Care Med. 2019 Jun 1;199(11):1368-1376. doi: 10.1164/rccm.201803-0589OC. PMID: 30576221.

