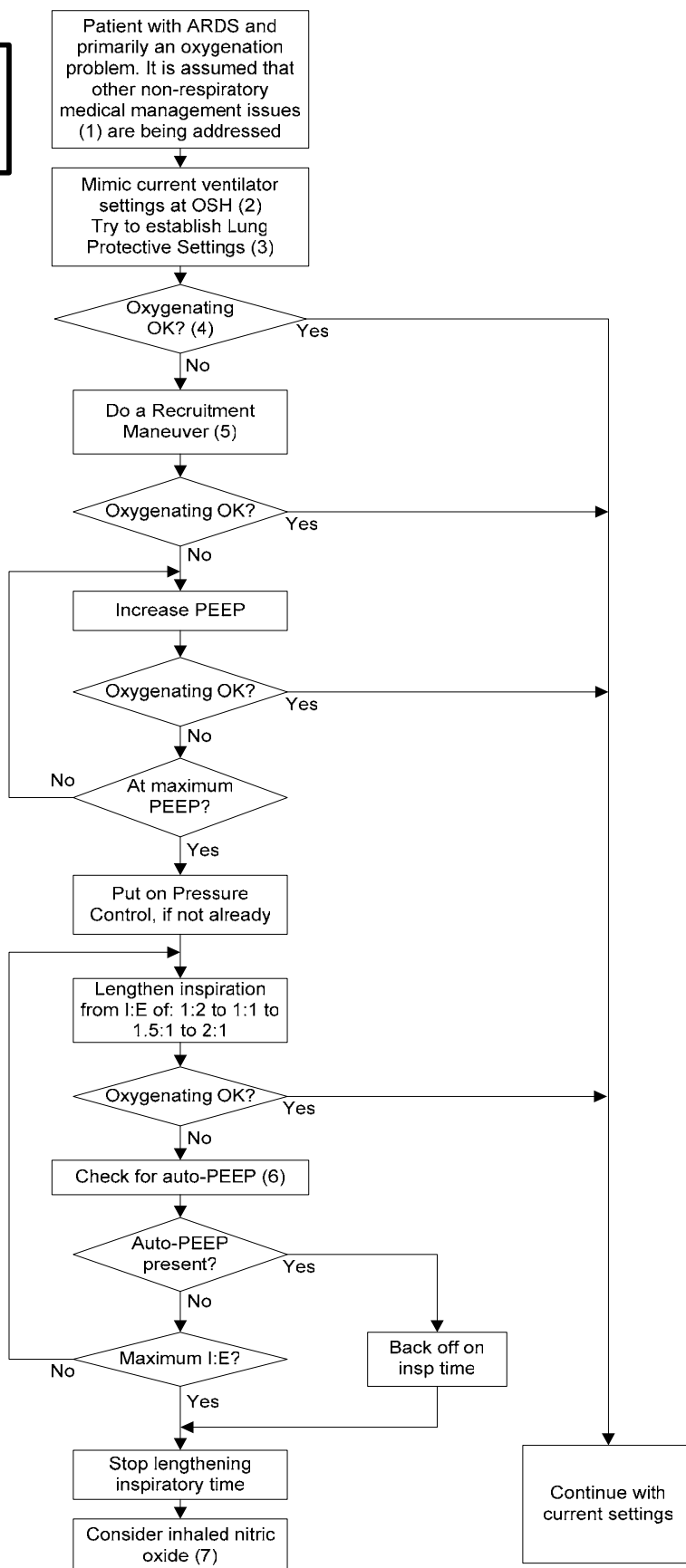


Ventilator Management for ARDS Patients for University of Michigan Survival Flight Staff

**DRAFT,
4/19**



1. Medical Management Pearls

- Check ionized calcium, if <1.3 and patient hypotensive administer calcium gluconate or chloride
- Check arterial pH, if <7.3 and PaCO₂ <60, administer IV sodium bicarbonate
- If mean arterial BP <60, initiate levophed infusion and consider vasopressin infusion at fixed dose 0.04 U/min
- Assess adequacy of sedation and neuromuscular blockade (fentanyl, midazolam, cisatracurium)

2. Mimic Settings

- If on VCV, target expired, not set VT

3. Lung Protective Ventilator Settings:

- Pplat <30-35 cm H₂O
- VT ~6 mL/kg IBW
- PEEP >12-15 cm H₂O

4. Oxygen Target

- SpO₂ >88%, if possible

5. Recruitment Maneuver

- Use a manual ventilator with a manometer
- Apply a moderate pressure (~40 cm H₂O) for an extended (~40 sec) time while monitoring the patient's response

6. Auto-PEEP Procedure

- Press the 'Insp/Exp Hold' button until it displays 'Exp Hold'
- Press it again and hold it until the auto-PEEP value is displayed, then release the button
- If patient effort is detected or the high pressure alarm activated the procedure is aborted
- It can not do the procedure on any spontaneous breath

7. Inhaled Nitric Oxide

- Use the iNO-Vent delivery system
- Administer 80 ppm, as a test dose.
- If the patient does not have a positive response (ie >10% in PaO₂/FiO₂), stop iNO
- If a positive response, reduce to 60, 40, 20 ppm. If P/F deteriorates, increase to previous level. Leave on 20 ppm for transport or lowest level tolerable, which ever is highest.

Contact Respiratory Care Supervisor (#1550) for consultation