Scaleable ICU Support for High Risk Inland Areas

Ship utilization to follow
RAPID CIVIL SUPPORT OF INTENSIVE CARE UNITS BY TITLE-10 RAPID, AIRMObILE, MILITARY INTENSIVE CARE ASSISTANCE TEAMS

Successful management of the CoV-19 pandemic requires local authorities to have a surge medical personnel and surge Intensive Care Unit (ICU) capability. However, many hospitals remain deficient in both these areas. In addition, recent data suggests the imminent need for intensive care beds with ventilation support may be 5% higher than previously estimated for some areas.¹

One solution is to rapidly create and prepare to deploy small airmobile, National Guard quick-reaction medical teams to those cities projected to experience the worst numbers of severe COVID-19 cases. This recent projection is based on the now recognized risk factors of advanced age demographics and community hypertension.¹ APPENDIX A.

On arrival, each deployed, airmobile 24-person medical ICU assistance team will be supported by a local National Guard unit. Each team will bring 50 ventilators and assist select medical facilities in the management of 50 extra ICU cases requiring ventilator support. APPENDIX B

The ventilators will be drawn from the National Strategic Stockpile well before team deployment along with the necessary drugs and other equipment. Upon the impending failure of an existing Healthcare Coalition area, these teams will fly directly to developing ICU overflow situations.

When the intensive care situation is stabilized in this area, these medical teams will restock and redeploy to another designated Civil Support area under threat.

Recommendations

1. The President via the SecDef should task the National Guard Bureau to immediately assemble 10 teams of 24-personel each (outlined in Appendix B).

2. Each team will be issued 50 ventilators, drugs and accessories from the Strategic National Stockpile or near-expired drugs from the Veteran’s Administration system.

3. These teams will be based at a central location with an attached rapid military airlift capability and their deployment coordinated through the National Guard Bureau.

4. Pre-planning should be made to create 30 additional teams (each with 50 ventilators, drugs, and equipment).

5. As the current pandemic progresses through the U.S. there will likely be a need to quickly assemble and activate these additional units for Civil Support. The proposed ability to assemble 40 teams would provide a total of 2000 ICU beds to local authorities accompanied by a medical surge of 960 medical personnel.
Appendix A

Areas With Projected 3.0-4.0 ICU Patients per 10,000 Adults During the COVID-19 Event Based on Wuhan, Chinese Data

Based on Age Census and Regional Hypertension Incidence.

1 Li, C. Rivers, The demand for inpatient and ICU beds for COVID-19: Lessons from Chinese cities. Pre-print

Appendix B

Airmobile Quick-Reaction ICU Assistance Team / 50 Ventilators

1 Team would consist of 24 personnel and 50 ventilators
10 Teams would consist of 240 personnel and 500 ventilators
40 Teams would consist of 960 personnel and 2000 ventilators

The number of teams can be quickly scaled to the developing pandemic
Ships

Hospital ships - claim within 5 day departure timeline, if the full medical staff is available the vessel is a hospital with over 1000 patient capacity with 300 of those beds being capable of supporting more severe patients and roughly 80 beds for severe patients (the vessel and her medical department was designed for trauma and not infectious patient treatment).

Roughly 100 intensive care and 300 of total intermediate-? I am not sure about ventilator support aboard total patients 1000 (in their wildest dreams, if all beds are being used) they don't have the staffing- I'll get the real numbers in a bit

Medical staff will require enough training and equipment to seal and operate in proper ppe (MOPP gear is not currently maintained aboard for all).

Camp PENDLETON, Calif. (NNS) -- The Naval Expeditionary Medical Training Institute (NEMTI) on Camp Pendleton, California, Expeditionary Medical Facility (EMF) basically a Tent hospital - once manned up and constructed, can handle scalable patient load similar to the hospital ships. These facilities compete for manning with the hospital ships, other military hospitals and various civilian hospitals since most of the crews are drawn from the reserves. There are three that are available but would have to be built and manned. There are additional storage locations, but these are at various levels of equipment needs. Army has similar.

There are a number of medical items (unknown number and type) at DRMO lots around the nation that should be put back in service ASAP.
The military morbidity will be same as civilian numbers, this is due to most service people now having families and living off base. On base housing and barracks are no longer adequate to house a full base of troops. Tents would have to suffice. Housing barges are available at most Navy ports and harbors these can house several hundred people in relative isolation in shared cabin spaces.

Recommendation from me, Military medicine suffered a large number reduction due to consolidation of service medical departments, immediate re assignment of basic trainees to be re ordered to the medical programs instead of their selected fields ie. infantry etc. this would train a number of basic technicians in the 16 weeks it takes a hospital corpsmen to be a corpsman. Army medics are not trained as broadly, but could be re targeted for hospital duty asap.

Immediate mobilization of US vacuum cleaner manufacturing to support PAPR production.

The big one is the immediate training of All recruits in bootcamp as Hospital Corpsmen, corpsmen should still be getting nursing in corpschool, and medics as LVN LPN etc. but we will need medical bodies and that’ll buy you immediate several thousand good quality folks FAST corpschool used be 16 weeks before they dumbed it down. I still think the old navy model HM was best for this work.