**Appendix 2. Data Included in Machine Learning Models:**

Demographics:

Age

Sex

Marital status

Admission source

* Home
* Acute care facility transfer
* Long-term care facility transfer

Clinical data:

Number of rapid response team (RRT) activations during admission

Length of stay prior to RRT activation

Vital signs (from admission to RRT activation)

* Heart rate
* Respiratory rate
* Systolic blood pressure
* Diastolic blood pressure
* Temperature
* Oxygen saturation
  + Also, we calculated a partial pressure of oxygen to fraction of inspired oxygen (P:F ratio) using the peripheral oxygen saturation and the estimated fraction of inspired oxygen (1)

Reason for RRT call:

* Respiratory distress
* Tachycardia
* Bradycardia
* Arrhythmia
* Altered level of consciousness
* Hypotension
* Hypertension
* Airway concern
* Seizure
* Worried about patient

Disposition:

* Transferred to ICU
* In-hospital mortality

Laboratory values included:

White blood cell count

Neutrophil count

Hemoglobin

Platelet count

Electrolytes

* Sodium
* Potassium

Serum glucose

Albumin

Anion gap

Bilirubin

INR

Urea

Creatinine

Troponin I

Lactate

Blood gas (arterial or venous)

* pH
* bicarbonate
* partial pressure of carbon dioxide
* partial pressure of oxygen
* base excess

References:

1) Conversion tables for saturation to partial pressure of oxygen, and method of supplemental oxygen to fraction of inspired oxygen. ISICEM. Available: https://www.intensive.org/epic2/Documents/Estimation%20of%20PO2%20and%20FiO2.pdf