**Table S-4.** Interventions used as input variables for RNN model.

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| --- |
| **Interventions** |

|  |  |  |
| --- | --- | --- |
| Abdominal X Ray | Mean Airway Pressure | O2 Flow Rate |
| Arterial Line Site | Mechanical Ventilation Mode | Oxygen Mode Level |
| CT Brain | Multi-Disciplinary Team Present | Oxygen Therapy |
| CT Chest | NIV Mode | PEEP |
| Central Venous Line Site | NIV Set Rate | Peak Inspiratory Pressure |
| Chest Tube Site | Nitric Oxide | Pharmacological Comfort   Measures Given |
| Chest X Ray | NALC TV | Position Support Given |
| Comfort Response Level | NALC ambulate | Position Tolerance Level |
| Diversional Activity books | NALC bedrest | Pressure Support |
| Diversional Activity music | NALC chair | Range of Motion   Assistance Type |
| Diversional Activity play | NALC commode | Sedation Intervention Level |
| Diversional Activity toys | NALC dangle | Sedation Response Level |
| Diversional Activity tv | NALC held | Tidal Volume Delivered |
| EPAP | NALC infant seat | Tidal Volume Expiratory |
| EVD Clamp | NALC logroll | Tidal Volume Inspiratory |
| EVD Set Level | NALC microturns | Tidal Volume Set |
| FiO2 | NALC out of bed | Tracheostomy Tube Size |
| Gastrostomy Tube Location | NALC play | Ventilator Rate |
| Hemofiltration Therapy  Mode | NALC repositioned | Ventriculostomy Site |
| IPAP | NALC swaddled | Visitor Mood Level |
| Inspiratory Time | NALC turn | Visitor Present |
| MRI Brain | NALC wheelchair | Volume Tidal |

See Table S-5 for acronym expansions ().