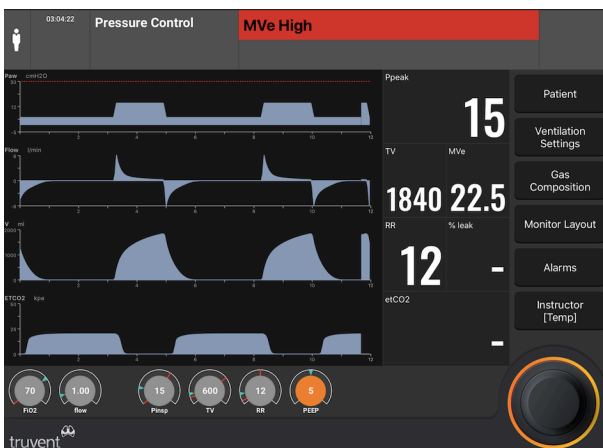




is a high-fidelity simulation platform that allows users to create complex clinical scenarios on a simulated ventilated patient.



## App Features & Benefits

- Includes commonly used mechanical ventilation modes (Assist Control, SIMV, PC, VC, CMV) & advanced ventilation modes.
- Student can take control of ventilator settings to achieve ventilation targets during simulation. As student adjusts ventilation parameters/strategy, respiratory engine adjusts accordingly.
- “Build a Breath” feature allows student to create bespoke ventilation strategies, enhancing teaching of mechanical ventilation principles.



- Instructor can choose & activate an anaesthesia complication which automatically adjusts relevant physiological & ventilation parameters (tension pneumothorax, anaphylaxis, bronchospasm, endotracheal tube disconnect, pulmonary embolism, malignant hyperpyrexia, local anaesthesia toxicity, cardiac arrest and many more...)
- Adjust age/height weight of simulated patient

## **Medical Simulation Training**

- Lung volume (calculated from height, gender, age)
- Dynamic lung compliance curves ranging from normal lungs to mild/moderate/severe disease states (ARDS/asthma/fibrotic etc)
- Inspiratory & expiratory resistance to airflow
- Intrinsic patient respiratory effort (rate, effort, I:E ratio, forced exhalation or paralysed)
- Triggering (adjustable flow & pressure sensitivity), limit, cycling, PEEP variables
- Variable flow patterns
- Respiratory rate, tidal volume, I:E ratio, PEEP
- Appropriate & adjustable ventilator monitoring/alarms
- Monitoring of inhaled & end tidal gas composition
- Calculation of minimum alveolar concentration from combined gas composition analysis to monitor depth of anaesthesia