**PSV: Pressure Support Ventilation**

This is a form of pressure control ventilation, with a target pressure which is aimed for with each breath.

- **Pressure Controlled**
- **Flow-Triggered** – and the pressure support breaths are flow-triggered
  - **Volume-limited**… but it doesn't have to be
  - **….Flow-limited** (but doesn't have to be flow-limited)
- **Flow-Cycled**

The key feature is, **THE VENTILATOR ONLY CONTROLS THE PRESSURE SUPPORT LEVEL.**

The rate, volume, cycling time and so forth are controlled by the patient.

You have some degree of control over the tidal volume: you can adjust the pressure support value (the higher it is, the higher a tidal volume the patient will inhale). You can also decrease the flow cycling trigger (so the breath lasts longer)

The flow has to be fast to reach the present pressure rapidly (just as in PCV)

Thereafter, as the pressure is reached, the flow rate has to drop swiftly, or else the pressure will continue to rise

As soon as the flow drops to a set cycling target (usually, 25% of the flow limit), the ventilator cycles to expiration.

This mode is typically combined with SIMV, as the non-mandatory component.

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With "Basic Assessment and Support in Intensive Care" by Gamersall et al as a foundation. I built using the humongous and canonical "Principles and Practice of Mechanical Ventilation" by Tobin et al – the 1442 page 2nd edition