ART MEDICAL
PATIENT SAFETY TECHNOLOGY

Multiple Measures to Prevent VAP/VAE in the ICU

The Challenge

Intubated patients lying supine are at high risk for aspiration pneumonia.
Ventilator-associated pneumonia (VAP) / ventilator associated events (VAE) are serious, common, and costly complications that may be caused by gastroesophageal reflux, leading to aspiration and vomiting. Real-time detection of reflux and reduction of aspiration are key in reducing the risk of VAP/VAE.

VAP/VAE is 1st in nosocomial infections in ICU [2]

96% of ICU patients are on mechanical ventilation. [1]

30% of ventilated ICU patients may develop VAP/VAE

9%-13% mortality due to VAP/VAE [2-7]

The Longer the Stay, the Higher the Risk.
The amount of time a patient stays in ICU is a major factor in increasing risk.

Spending **6 extra days** in the hospital increases the mortality rate by **3** [8-9]

Patients spend an **additional 7 days in ICU due to VAP/VAE** [10]

50% of patients are more likely to return to the hospital **within 30 days** [11]

No Current Technological Solutions

ICU teams carry out various tests and procedures involving time-consuming manual labor which is frequently ineffective and does not provide real-time, lifesaving data. [9] [12]

Head-of-bed elevation to 30°-45°

Interrupt sedation daily and gastric suction (GRV test)

Feeding tube position verification carried out via repeated X-rays

According to ESPEN Guidelines [13]

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smART+™ Platform

VAP/VAE reduction through protective lung technology

smART+™ Console
A nutrition management system and optimal feeding plan to achieve 100% feeding efficiency

smART+™ Metabolism
Continuous Resting Energy Expenditure (REE) measurement

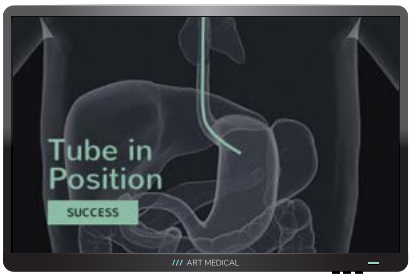
smART+™ Sensor - based feeding tube
Detection of gastric reflux and reduction of aspiration

smART+™ Hub
Dynamic, real-time micro-residual evacuation

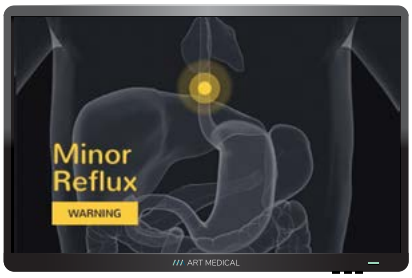
smART+™ urineFlow
Real-time urine flow monitoring and trend prediction

smART+™ helps reduce VAP/VAE using automatic reflux detection, which reduces aspiration and related serious complications.

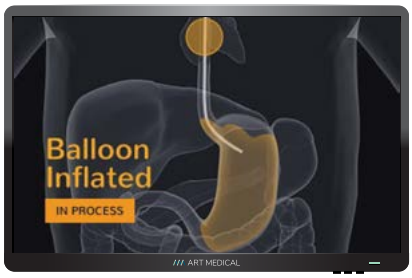
To make the right decisions, you need the right information in real time



Positions feeding tube accurately and in real time.



Detects reflux via smART+™ tube sensors and reduces the risk of potential aspiration.



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Detects and alerts healthcare professionals to take action.

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