



THE METANEB® SYSTEM IN AN ACUTE CARE HOSPITAL SETTING:

an assessment of the impact on hospital length of stay using a failure mode and effects analysis

OVERVIEW

A 3-month evaluation was performed to determine impact of use of The MetaNeb System an oscillation and lung expansion (OLE) device in hospitalized patients with pneumonia and multifocal or bilateral infiltrates on chest X-ray (CXR).

- 11 patients in retrospective study group and 11 similar patients in The MetaNeb System group (P=0.029).
- The MetaNeb System patients received aerosol, continuous high-frequency oscillation (CHFO) and continuous positive expiratory pressure (CPEP) therapy alternating 2 minutes of CHFO and CPEP for a total treatment time of 8 minutes, respectively, for 48 or more hours.
- Suctioning performed as needed.

11

MetaNeb patients and
11 non-MetaNeb patients

OUTCOMES

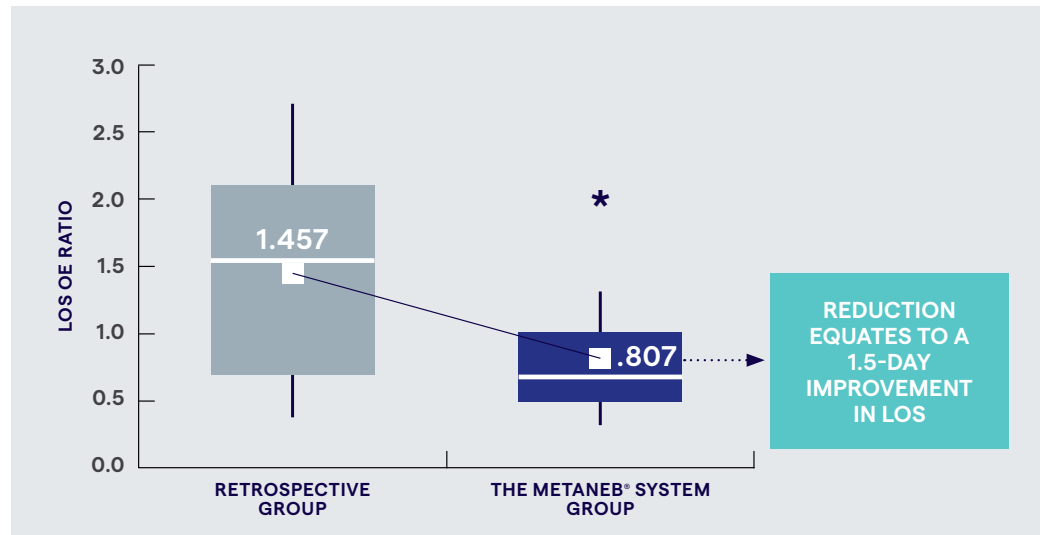
A failure mode and effects analysis (FMEA) was used to evaluate the average length of stay (LOS) for the first sequentially treated patients with The MetaNeb System, compared to the average LOS of a retrospective group of identical patients.

The MetaNeb System OLE treatment had a statistically significant effect on reducing the mean LOS observed-to-expected (OE) ratio.

Mean LOS OE ratio in The MetaNeb System group was 0.807 ± 0.502 compared to 1.457 ± 0.752 in the retrospective group (difference 0.65; 95%).

EVIDENCE

Boxplot of LOS OE Ratio



For more information, please contact your Hillrom sales representative at 1-800-426-4224.

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References

¹ Grasley T. The MetaNeb® System in an acute care hospital setting: an assessment of impact on hospital length of stay using a failure mode and effects analysis. Hill-Rom White Paper. 2012.

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