

## Novaerus Study Summary Report

### Overview

Vernon Manor Health Care and Rehabilitation (VMHCR) implemented Novaerus technology in April 2014. This technology controls airborne infections by eradicating viruses, bacteria, mold, and allergens as well as harmful contaminants such as MRSA, C-Diff, Norovirus and influenza. VMHCR implemented the Novaerus technology in main hallways throughout the facility and utilized portable units intermittently in select rooms. This study (which is not a clinical study) compares the nosocomial (facility acquired) infection rates related to respiratory etiologies before and after the implementation of Novaerus technology.

### Methodology

A 24-month review was performed on VMHCR to evaluate the results that the CEO stated that his facility had benefitted from. A Nurse Risk Manager Consultant visited the facility for two days to pull the facility information and to review the following data:

- Admission, transfer, and discharge data for all residents,
- Monthly infection control records, reports, and surveillance,
- Individual resident infection control examination results (x-rays, cultures, etc.), and
- A map of the facility, which displays selected areas where the Novaerus system implemented.

The period selected for this study compares the June 2013 thru February 2014 timeframe (prior to Novaerus implementation) and June 2014 thru February 2015 timeframe after implementation. Comparison of like periods pre and post implementation reduces the risk of skewed data related to seasonal variances that might occur with infection rates. This study tallies and compares the nosocomial infection occurrences related to respiratory etiologies in both periods.

### Conclusion

Prior to implementation of Novaerus technology the facility sum total of nosocomial infections related to respiratory etiologies tallied 59. In the period after Novaerus implementation the facility sum total of nosocomial infections related to respiratory etiologies tallied 24, **which is a decline of 59.32%**. Clearly, implementation of the Novaerus technology has contributed significantly to the infection control as well as quality improvement efforts at VMHCR. The attached graph illustrates this comparison.

