



# Uncover and quantify hospital-acquired pneumonia (HAP)

## #1 HAI

hospital-acquired  
infection in the US<sup>1</sup>

## \$39,897

estimated Acute Care  
cost per case<sup>2</sup>

Oral care is the **#1 missed practice** from  
the patients' perspective<sup>3</sup>

### Understand your current practice<sup>4</sup>

A basic oral care practice assessment helps uncover gaps

For example:

- Non-ventilator oral care protocol
- Current product usage
- Logistical gaps
- Product and education needs

## 47%

of 4,856 patients  
did **not use or  
have access** to  
a toothbrush

### Understand toothbrush usage<sup>4</sup>

Toothbrush testing highlights a need for replacement  
protocol and bacterial colonization rates

A third party laboratory tests toothbrushes for  
five bacterial strains:

- MRSA
- *S. Aureus*
- Enterococcus
- VRE
- Gram-negatives

## 49%

of 1,086  
toothbrushes  
were  
**contaminated**

# Quantified patient and financial impact

## Partner with Sage to determine impact

Obtain one year's diagnosis (1-10), present on admission data, age, length of stay (LOS), and discharge path for all patients.

**CustomerOne** mines data for ICD-10 codes associated with pneumonia or sepsis that developed 48 hours after admission.

## Example of data set needed:

Patient	Age	LOS	Discharge	Diagnosis_1	POA_1
A	60	4	Hospice	J18.9	Yes
B	40	15	Expired	J18.9	No
C	80	7	Home	J18.9	Yes

## Findings to include:

- Number of non-ventilator HAPs
- Sepsis correlation to non-ventilator HAPs
- Discharge path (Hospice, Expired, Home)
- Mortality rate
- Average length of stay
- Average age
- Cost

## Continuum of care: HAP reduction initiative

### One hospital's findings in 1 year:<sup>5</sup>

# 37%

less likely to acquire NV-HAP

# 60

NV-HAP cases avoided

# \$2.28M

return on investment (ROI)

## All hospital patients are at risk<sup>5</sup>

Address the risk factors associated with pneumonia throughout the **continuum of care:**

**Pre-surgical**



**Ventilated**



**Non-ventilated**  
Dependent Independent



**References:** 1. Magill SS, O'Leary E, Janelle SJ, et al. Changes in Prevalence of Health Care-Associated Infections in U.S. Hospitals. *New England Journal of Medicine*. 2018;379(18):1732-1744. 2. Giuliano K, Baker D, Quinn B. The epidemiology of nonventilator hospital-acquired pneumonia in the United States. *American Journal of Infection Control*. October 2017;1-6. 3. Kalisch BJ. Errors of Omission: How Missed Nursing Care Imperils Patients. Silver Spring, MD: American Nurses Association; 2016. 4. Data on file., Sage Products. Laboratory testing conducted by Advanced Testing Laboratory 5. Baker D, Quinn B. Hospital Acquired Pneumonia Prevention Initiative-2: Incidence of nonventilator hospital-acquired pneumonia in the United States. *American Journal of Infection Control*. 2018;46(1):2-7.