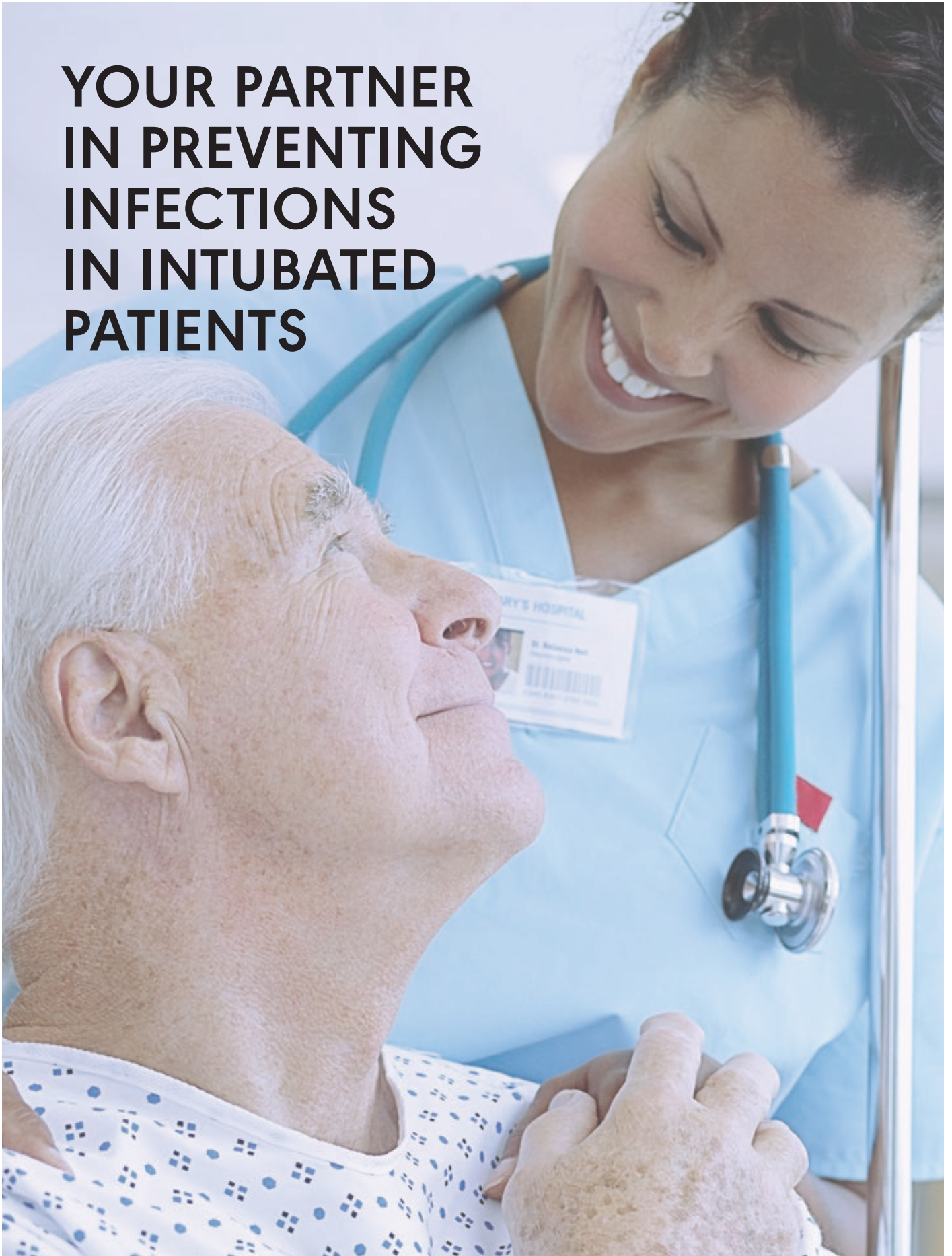


**YOUR PARTNER
IN PREVENTING
INFECTIONS
IN INTUBATED
PATIENTS**



INFECTION PREVENTION IN HOSPITALS

HOSPITAL-ACQUIRED INFECTIONS (HAI) - A MAJOR CLINICAL CONCERN

- In Europe, HAI (Hospital-Acquired Infections) cause 16 million extra days of hospital stay and 37 000 attributable deaths (and contribute to an additional 110 000). Associated costs: approximately € 7 billion annually.¹
- Pneumonia is the main HAI ranging between 25-50% of total cases.²
- Approximately 86% of hospital-associated pneumonia is linked to mechanical ventilation¹⁵
- VAP (Ventilator-Associated Pneumonia) attributable mortality: between 7% and 30%¹; excess costs: € 16-33K³ per case; excess hospital length of stay: up to 14 days⁴

INFECTION PREVENTION IS A MULTI-FACETED APPROACH¹⁶

VAP is the most common and fatal infection of the ICU. There are various potential sources of infection that are believed to increase the risk of VAP:

- Oral cavity
- GI colonisation and reflux
- Subglottic secretions
- Inhalation of pathogens
- Patient-to-patient
- Contaminated equipment
- Breaking ventilator circuit

CONSISTENT COMPLIANCE WITH CLINICAL GUIDELINES CAN HELP REDUCE VAP⁵

“Reducing mortality due to VAP requires an organized process that guarantees early recognition of pneumonia and consistent application of the best evidence-based practices.”⁶

- Institute for Healthcare Improvement



PREVENT CONTAMINATION

- Infection Control
- Disinfection and sterilisation
- Care and maintenance of equipment and devices



REDUCE COLONISATION

- Oral hygiene
- Nasal hygiene
- Common suction protocol
- Closed suction rinse protocol, when closed suction system is used
- Condensation traps
- Stress ulcer prophylaxis



REDUCE OR PREVENT ASPIRATION

- Elevate head of bed 30-45°
- Tracheal seal designed to reduce micro-aspiration
- Cuff pressure maintenance
- Enteral feeding/preventing gastric distention or reflux
- Subglottic suction



BOOST DEFENSES

- Oral vs. nasal tube placement
- Ventilator weaning or discontinuation
- Vaccination

AVANOS* RESPIRATORY HEALTH SOLUTIONS

ORAL CARE SOLUTIONS

AVANOS* ORAL CARE Q4 KIT AND INDIVIDUAL COMPONENTS

Conveniently packaged oral care kits and systems – designed by nurses for nurses, providing consistent and comprehensive oral care

- 9 out of 10 clinicians agree that AVANOS* Oral Care q4 Kit encourages oral frequency⁷
- Helps promote compliance to protocol
- Innovative self-cleaning covered Yankauer (featuring technology from BALLARD*)
- Easy to use suctioning toothbrush

“Good oral hygiene measures help reduce the number of colonized bacteria in the mouth and prevent the spread of infection from the oral cavity to the lower respiratory tract.”^{8,9}



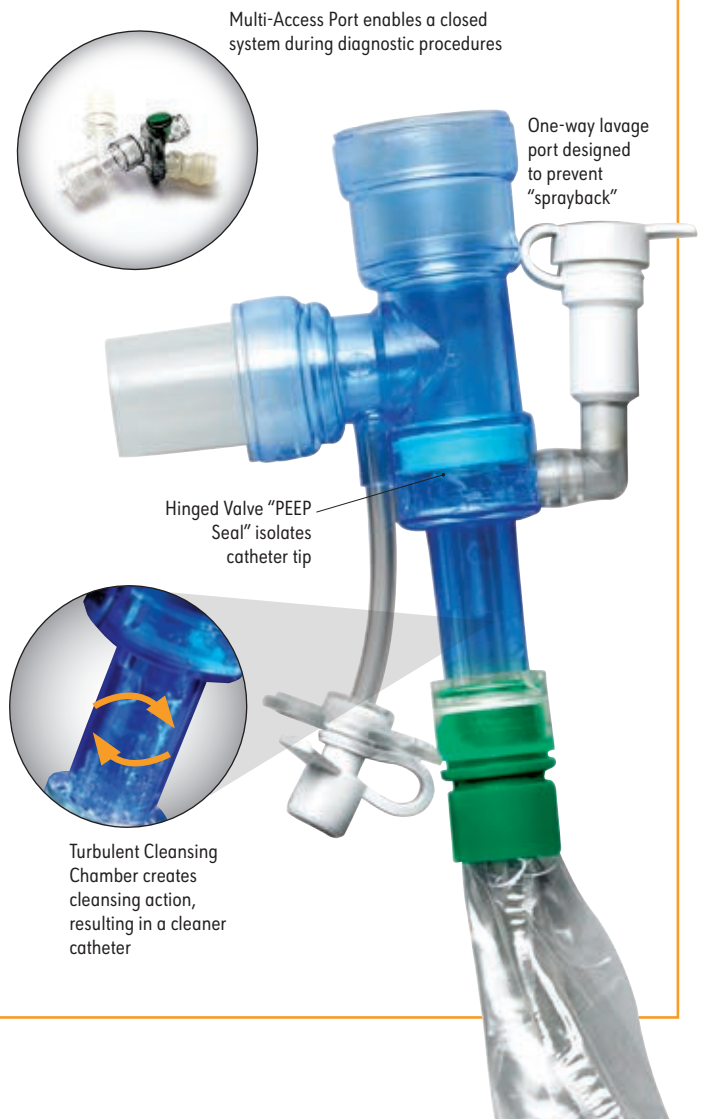
CLOSED SUCTION SYSTEMS

AVANOS* CLOSED SUCTION SYSTEMS WITH BALLARD* TECHNOLOGY

The AVANOS* Turbo-Cleaning Catheter with turbulent cleaning action reduces bacterial colonisation by 89% compared to standard closed suction systems¹⁰

- Closed suction systems reduce the opportunity for contamination to occur from outside pathogens, thus reducing the bacterial colonisation within the circuit¹¹

“The pathogenesis of VAP...is linked to two separate but related processes: colonisation of the aerodigestive tract with pathogenic bacteria, and aspiration of contaminated secretions.”¹² – Kollef, et al. Respiratory Care, 2005



FOR EFFECTIVE INFECTION PREVENTION

ENDOTRACHEAL TUBES

AVANOS* MICROCUFF* SUBGLOTTIC SUCTIONING ENDOTRACHEAL TUBES

Provide an effective tracheal seal designed to reduce micro-aspiration – a known cause of VAP¹³

- Combine more effective subglottic suctioning with our advanced MICROCUFF* polyurethane cuff technology to provide an effective protection against micro-aspiration^{13,14}
- More effective at preventing and clearing clogs. Thanks to saline rinsing, improved fit and seal of polyurethane cuff, subglottic suctioning is easy and smooth^{13,14}

Provides an effective seal at low cuff pressure, reducing risk of tracheal trauma



ENDOTRACHEAL TUBES

AVANOS* MICROCUFF* ENDOTRACHEAL TUBES

- AVANOS* MICROCUFF* Endotracheal Tubes feature an advanced microthin polyurethane cuff
- The cylindrical shaped polyurethane cuff provides a superior tracheal seal for a wider range of trachea sizes and cuff sealing pressures compared to leading PVC cuffed tubes



DIAGNOSTIC CATHETERS

AVANOS* MINI-BAL SAMPLING CATHETER

Enables early, accurate diagnosis of VAP providing accuracy similar to bronchoscopic Broncho-Alveolar Lavage

- Simple, effective bronchoalveolar lavage at the bedside
- Allows safe BAL high yield samples within a short period of time
- Provides safety and accuracy to clinicians where bronchoscopy is not readily available

Radiopaque soft, atraumatic directional tip allows right or left lung sampling





KNOWLEDGEABLE CUSTOMER SUPPORT

- In-service training
- Product technical support
- Knowledgeable customer service

EXPERT SALES FORCE

- Healthcare industry expert sales force
- On-site trained in hospitals

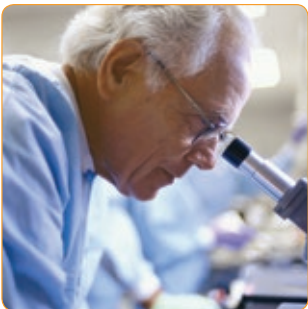


COMPLIANCE TOOLS & BEST PRACTICES

- Utilisation reviews
- Product use and selection tools
- Best practices/ industry guidelines

CLINICAL RESEARCH

- Staff medical professionals to advise and direct clinical research
- Peer-to-peer consultation



PURPOSEFUL INNOVATION

- Ongoing research and development delivering industry-defining solutions to today's clinical issues

COMMITMENT TO EXCELLENCE

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