

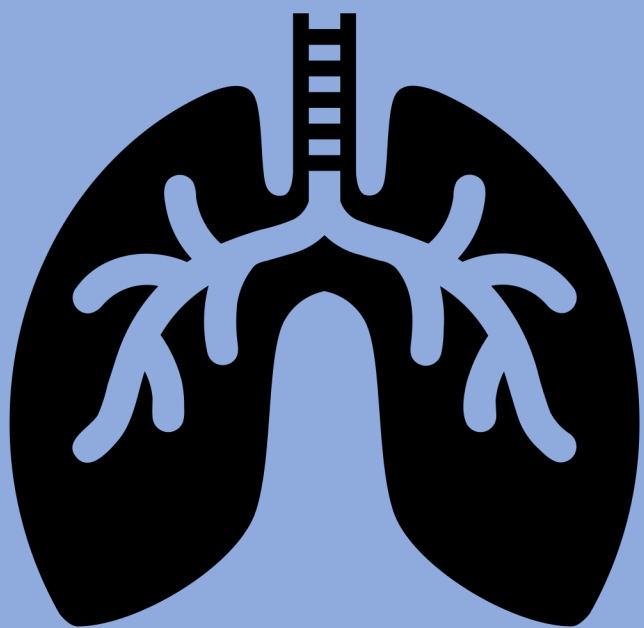
Tackling VAPs the Up-to-Date Way

SOA21

Catherine McGow, Jennifer Reynolds, Victoria Green and William Angus

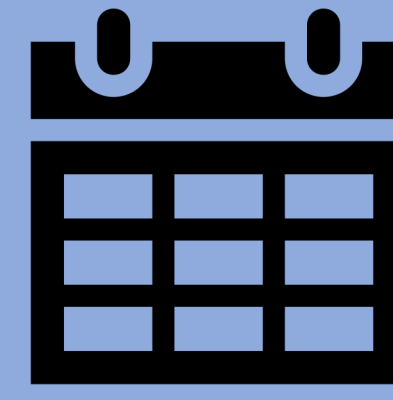
Liverpool University Hospital NHS Foundation Trust

Introduction



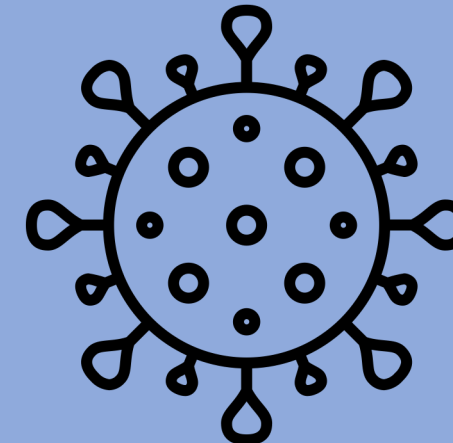
Ventilator-associated pneumonias (VAPs) are the most frequent healthcare associated infection in adult critical care units.¹

LINKED TO



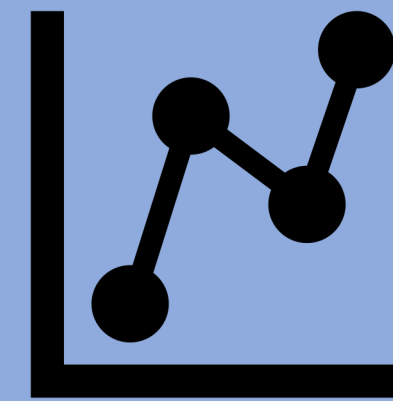
Increased length of stay and mortality.²

TO TACKLE THIS



Early identification of pathogen & early targeted antibiotics.³

BEST WAY TO DO THIS



Non-directed bronchial lavage (NBL) is more sensitive than endotracheal aspirate (ETA) in identifying pathogens.^{4,5}

Objectives

Two Main Objectives:

- ↑ use of NBL sampling on mechanically ventilated patients
- Ensure a standardised approach

Method

We assessed staff's knowledge of the technique using a questionnaire

REPEATED QUESTIONNAIRE

We created an equipment list and guide. We also ran education sessions

If you were asked to perform a non-directed BAL sample or mini-BAL, how would you do this?

- Pre-oxygenation prior to procedure?
- Use of sterile gloves?
- Sputum pot connected to inline suction
- Sputum pot connected to inline suction, plus saline down ETT
- Use of new sterile suction catheter
- Instillation of saline using sterile suction catheter and bladder syringe
- If using saline, what volume is used
- Other: _____

Results

30 staff took part in the initial questionnaire

On average they were aware of 39% of the steps to complete a NBL

TRAINING + GUIDE

17 staff took part in the repeat questionnaire

On average they were aware of 67% of the steps to complete a NBL.

Conclusion

We are pleased with the initial results BUT:



We are aware with trainees frequently rotating projects often don't continue, leading to frustration



We have therefore enrolled the clinical educator team to help educate the 100 nurses who work on our unit

We will reassess the success of this project in the future in 3 ways:

1. Assessing the number of NBL samples sent
2. Test knowledge of the procedure
3. Review how many patients with VAPs have their antibiotics guided by a microbiological sample

References

1. Vincent JL, Sakr Y, Sprung CL et al. Sepsis in European intensive care units: results of the SOAP study. Crit Care Med 2006; 34: 344–53
2. Hunter JD. Ventilator associated pneumonia. BMJ. 2012 May 29;344.
3. Felton T, Mount T, Chadwick P, Ghrew M, Dark P. Surveillance non-directed bronchial lavage allows confident use of focused antibiotics in the management of ventilator-associated pneumonia. Journal of Infection. 2010 May 1;60(5):397-9.
4. Cook D, Mandell L. Endotracheal aspiration in the diagnosis of ventilator-associated pneumonia. Chest 2000;117(4 Suppl. 2):195Se197S.
5. Campbell Jr GD. Blinded invasive diagnostic procedures in ventilator-associated pneumonia. Chest 2000;117(4 Suppl. 2):207Se211S.