



Prevalence Of Bowel Colonisation With Clinically Significant Bacteria Among Highly Dependent Residents In A Private Long Term Care Facility (LTCF)



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Background: Due to the high levels of antibiotic usage in nursing homes, they are perceived as a potential reservoir for multidrug resistant bacteria and a point of entry into acute health care facilities.

The aim of this study was to examine the prevalence of bowel colonisation with clinically significant bacteria and analyse the characteristics of the tested cohort in a 140 bedded LTCF

Methods: A quantitative point prevalence study was carried out over a ten day period in February 2017.

Faeces specimens from consenting residents were cultured and identified for:

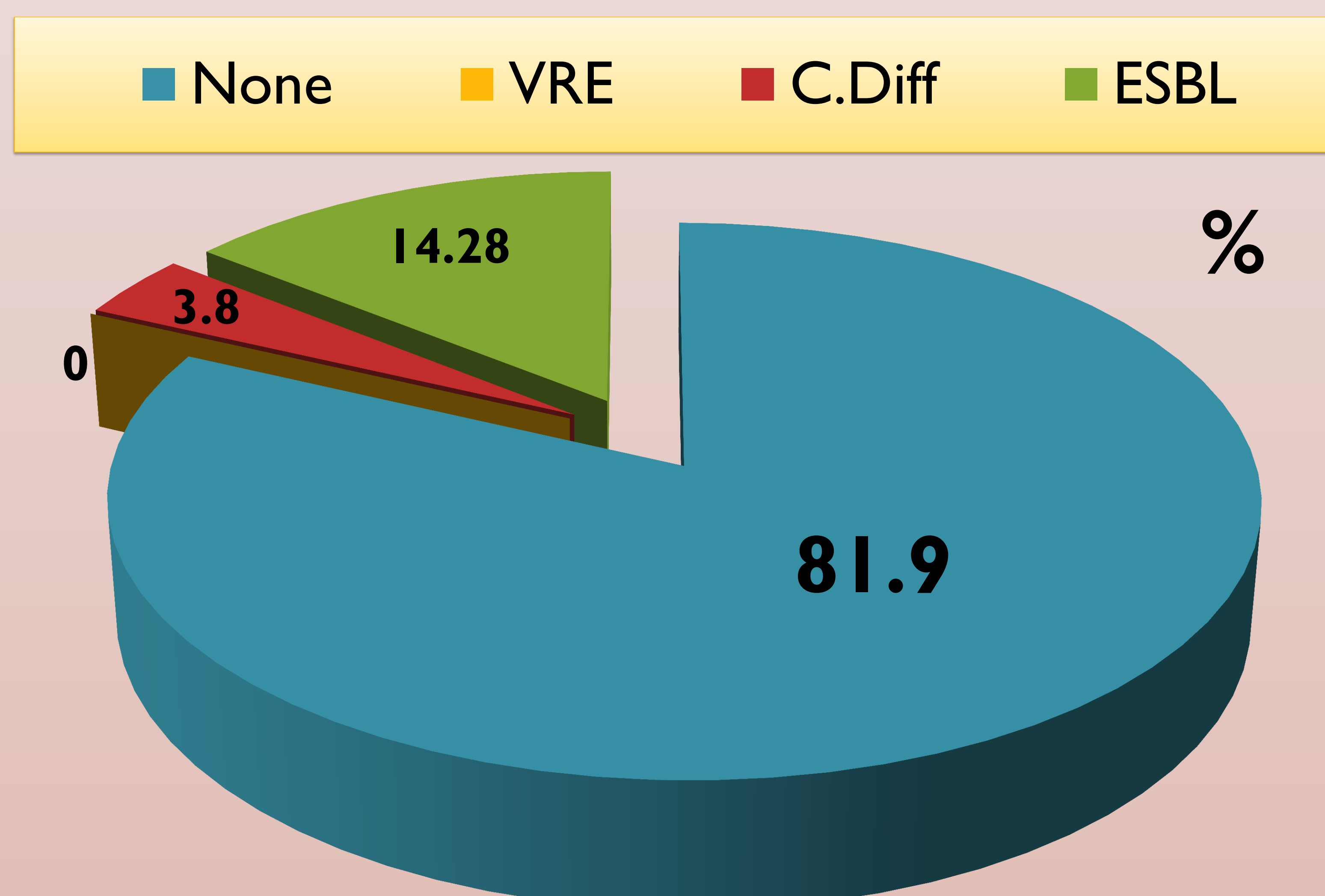
Clostridium difficile (*C.difficile*) Vancomycin Resistant Enterococci (VRE) and Extended Spectrum Beta-Lactamases (ESBL)-producing Enterobacteriaceae, using standard laboratory processes.

Residents' age, level of cognition, continence, mobility, use of indwelling devices and accommodation status were analysed.

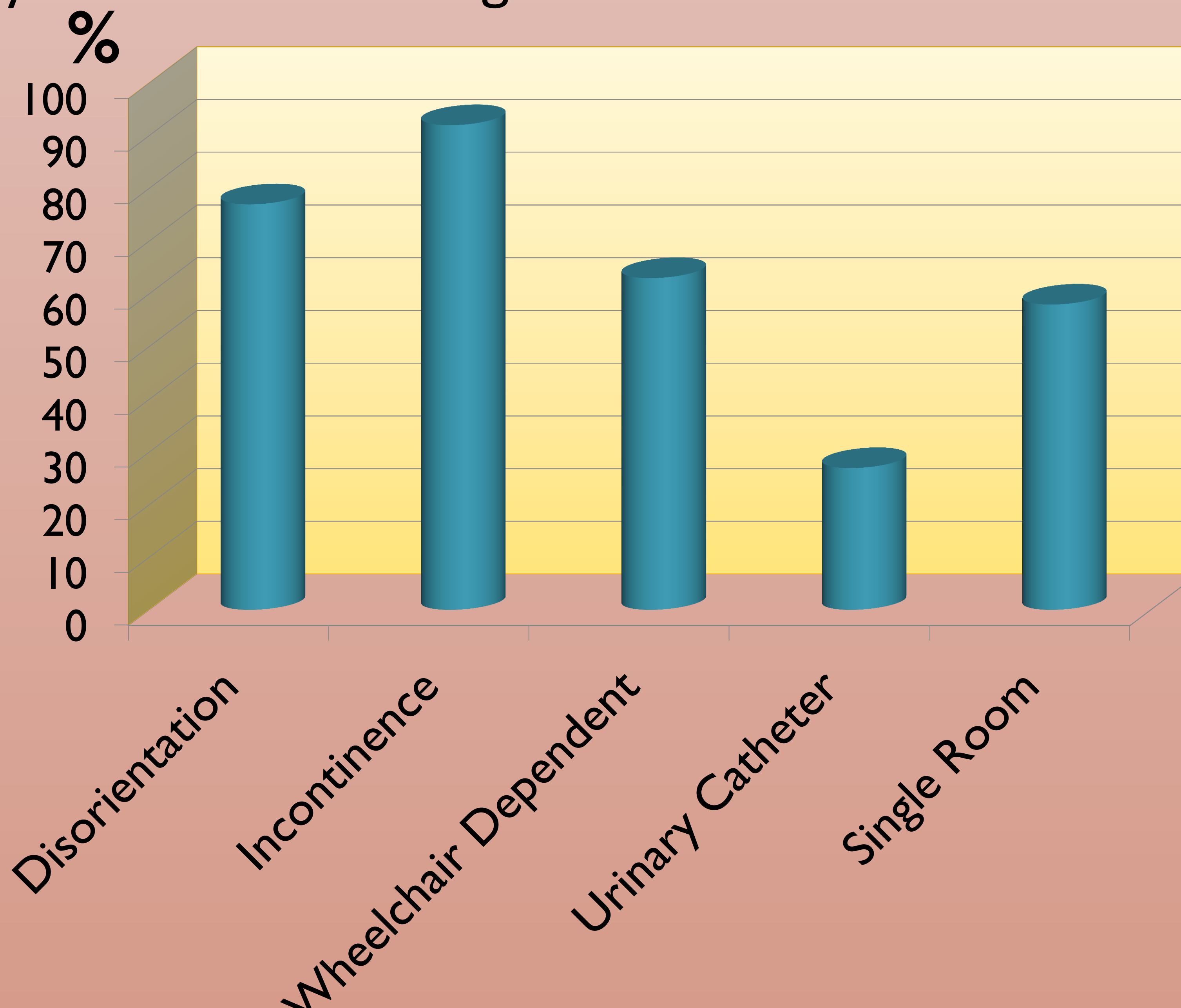
Results:

Laboratory data (n=77 residents):

- **None** of the 77 residents that provided a sample were positive for **VRE**.
- **Three** residents were colonised with different ribotypes of ***C. difficile***, of which only one was toxigenic.
- **Eleven** residents, from five separate wards, were colonised with **ESBLs**.



The mean age of the population studied was 77 years with following characteristics:



Conclusions: It was established that 18.1 % of the cohort studied were colonised with clinically significant bacteria in their bowel, which contradicts previous findings of 56% prevalence in LTCF.

Despite the high dependency levels and low level of functional ability, the expected level of colonisation was not detected.

References:

1. Garrett WS, Gordon JI, Glimcher LH: Homeostasis and Inflammation in the Intestine. Cell 2010, 140:859-870.
2. Ludden, Cormican M et al., "Colonisation with ESBL-producing and carbapenemase-producing Enterobacteriaceae, vancomycin-resistant enterococci, and meticillin-resistant Staphylococcus aureus in a long-term care facility over one year." BMC Infectious Diseases (2015) 15:168.

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