Background The elderly population keeps growing and a lot are living in nursing homes, where infections are frequent as patients are weak and the risk of transmission is high.

Purpose Nursing home physicians wanted to standardise practice for antibiotic treatment. With the aim of quality and safety of care, prescriptions for antibiotics for urinary infections (UIs) and lower respiratory tract infections (LRTIs) were assessed.

Materials and Methods A prospective study: for two months, each prescription for antibiotics was studied. For each antibiotic, the site of infection, dose, duration and reassessment of the treatment after 48 to 72 hours were checked. These criteria were compared to guidelines approved by our ‘antibiotics committee’. Results of bacteriological samples, history of antibiotic treatment in the previous three months were also checked.

Results 82 patients were treated with antibiotics. Mean age was 81.4 years old. There were 56 LRTIs, 13 UIs. There are no guidelines for the treatment of bronchitis in the elderly so assessment of antibiotic treatment was not possible. The choice of drug was appropriate in 100% of UIs and LRTIs. The dose was adequate in 100% of the cases. Duration of treatment was adequate in 50% for cystitis, 0% for prostatitis, and 97.4% for LRTIs. Most of treatment was empirical (95.5%), few bacteriological samples were taken: 3% for pneumonia, 7.10% for bronchitis, 0% for exacerbations of chronic obstructive pulmonary disease, 62.5% for cystitis, and 33.3% for prostatitis. Traceability of reassessment after 48–72 hours couldn’t be found in 98.7% of cases.

Conclusions Specific guidelines for antibiotic treatment were written to facilitate and standardise the prescribing process. Pharmacists and physicians decided to treat bronchitis like pneumonia. Indeed, this study underlined the specificity of patient care in nursing homes. However, more bacteriological samples need to be taken to prescribe the right treatment and to prevent antibiotic resistance.

No conflict of interest.