

Introduction: Home care has grown exponentially with a progressive increase in complex clinical conditions, such as invasive mechanical ventilation (MV). Ventilation-associated pneumonia (VAP) is the leading cause of death related to hospital-acquired infections. Data about VAP incidence at home are scarce.

Objective: Analyze home care (HC) density of VAP, clinical outcome and rate of continued MV in patients treated by a private Brazilian HC company.

Methods: Retrospective cohort, VAP diagnosis was based criteria proposed by APIC¹, CDC² and ANVISA^{3,4}.

Data were compared with the latest Brazilian intensive care data.

VAP density was calculated as number of VAP/number of ventilation-days x 1000 and density of continuous MV through the number of ventilation-days/number of patient-days x 1000.

Results: Between April 2019 and March 2021, we treated an average of 441 patients-day with ventilatory support, 80% invasive and 20% non-invasive. Rate of continuous MV was 16%, 119 patients had VAP, 30% children, 40% adults and 30% elderly (Figure 1).

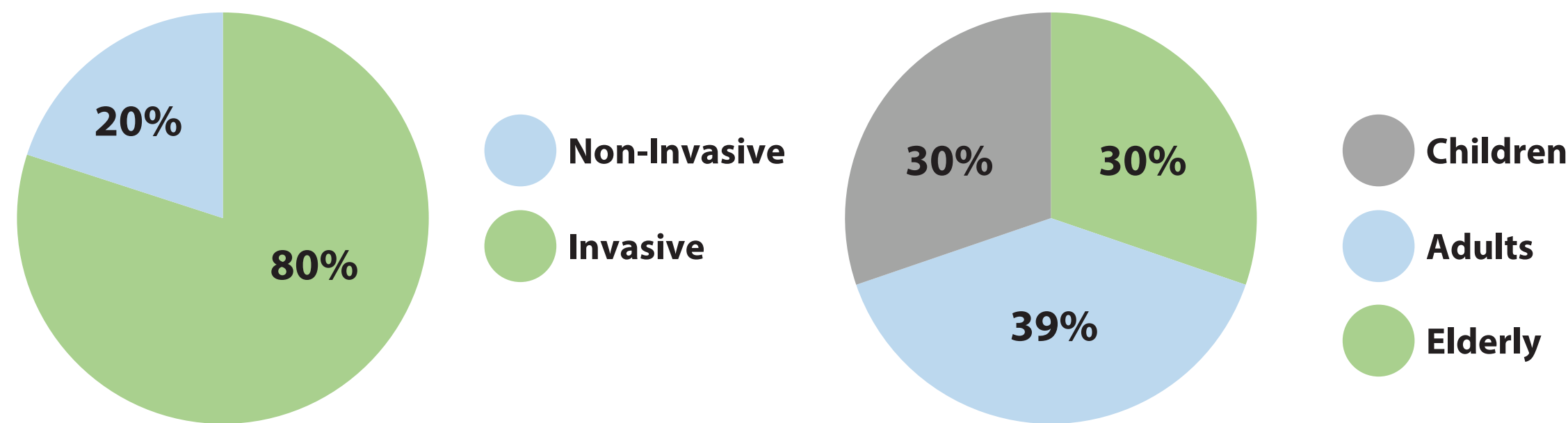


Figure 1. Distribution by ventilatory support and age

Density of VAP was 1,19 cases/1000 patient-days, much lower than that demonstrated in ICUs (11,5) (Figure 2).

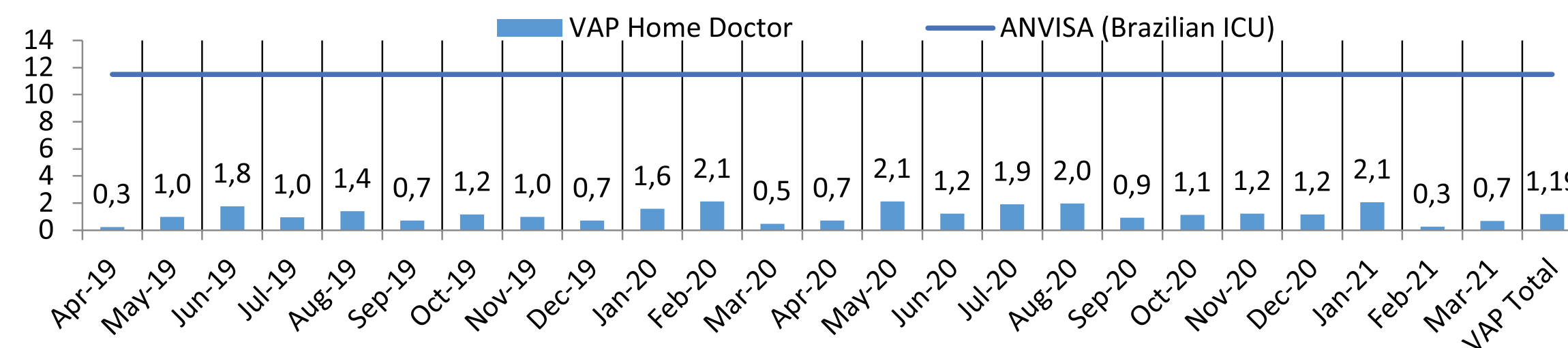


Figure 2: VAP density incidence: Home Doctor x ANVISA

Average time between HC admission and VAP was 307 days. Most prevalent underlying diseases were neurological (73,4%) and amyotrophic lateral sclerosis was the most prevalent (20 patients).

94 patients (79%) were treated at home. Most frequently prescribed antibiotics were: ceftriaxone 19%; amoxicillin-clavulanate 10%; levofloxacin 9%; axetilcefuroxime 7%; ertapenem 6%; cefepime 5% (Figure 3).



Figure 3 - Home Treatment Antibiotics

Conclusion: Patients at home MV have lower rates of VAP than ICUs patients, usually can be treated at home, without the need for broad-spectrum antimicrobials and with good clinical outcome.