GRANTEE HIGHLIGHT

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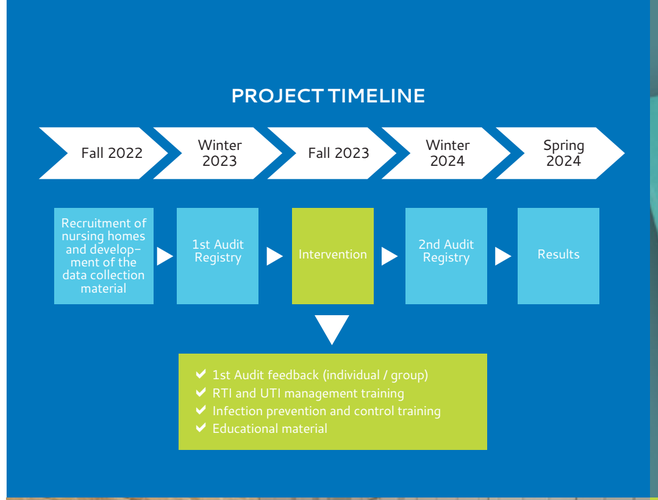
IMproving Antibiotic prescribinG In NursIng homEs in Spain. A before and after intervention study (IMAGINE Study).

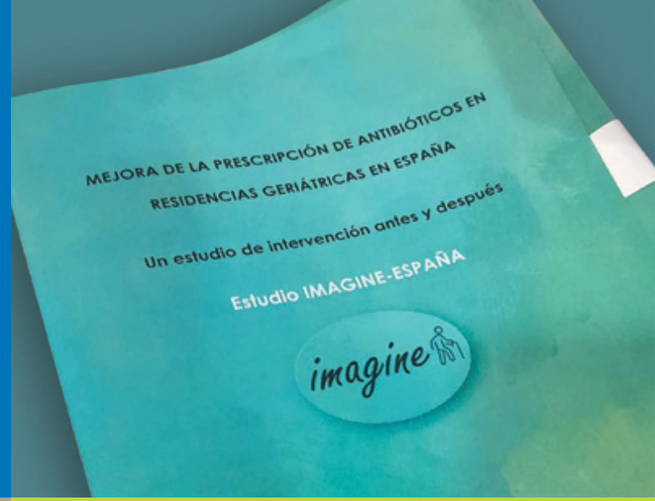
The absence of effective infection prevention and control measures contributes to antimicrobial over-prescribing in long-term care facilities. This overuse of antibiotics is a primary driver of antimicrobial resistance, a significant concern given the vulnerability of frail elderly individuals to frequent and severe infections. Healthcare associated infections, particularly respiratory and urinary tract infections, are common in these facilities, with some caused by resistant bacteria. However, these infections could be mitigated through antibiotic stewardship and improved hygiene practices. A 2017 European survey revealed that Spain had the highest antibiotic prescribing rate in nursing homes among the 27 member states. Despite this, there has been a lack of antimicrobial steward-ship interventions in nursing homes in the country. Additionally, long-standing resource deficits and health inequalities in this setting have been exacerbated, particularly evident during the recent COVID-19 pandemic. Nursing homes, historically lacking in health and care resources, directly impact the residents' health.

Given these challenges, nursing homes represent a critical target for initiatives aimed at reducing inappropriate antibiotic use. The objective of this project is to enhance the prevention of healthcare-associated infections and decrease the inappropriate use of antibiotics in these infections. This is to be achieved through the implementation of an intervention specifically targeting healthcare professionals working in nursing homes. During a two-month period in late winter 2023, healthcare professionals in each nursing home recorded information about all urinary and respiratory tract infections using simple registration sheets. Following the intervention, the registration process will be repeated in the late winter months of 2024. In January 2024, a one-day intervention took place, involving the presentation of results from the initial registration and facilitating discussion among peers.

The preliminary findings from the initial registration audit reveal insights from 34 participating nursing homes across five nodes. Residents with infections had an average age of 85.8, predominantly female (69.2%). Of the 1,505 registered infections, 47.8% were urinary tract infections, more prevalent in women (51.5%), while respiratory infections were more common in men (40.4%). Antibiotic prescription rates varied from 56% to 100%, exceeding 80% in 27 homes and reaching 100% in 14. The average antibiotic therapy duration was 6.8 days.

Fosfomycin, cephalosporins, and quinolones were the most prescribed for urinary tract infections (40.1%, 17.9%, and 12%, respectively). Respiratory tract infections numbered 533 (35.4%), with varying antibiotic prescribing rates for different conditions. Tonsillitis reached 100%, pneumonia 95.9%, acute bronchitis 92%, pharyngitis 91.3%, bronchoaspirative respiratory infection 88.9%, COPD exacerbations 85%, COVID-19 infection 61.5%, influenza 47.8%, and the common cold 29.5%. These findings, when finalized, will enhance the quality of antimicrobial administration, leading to fewer side effects among nursing home residents.





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