Analysis of the medication treatment of community-acquired pneumonia treated in the community and having resulted in hospitalization

C.Trouilleux(1), H.Faure(1), H.Poujol(1), C.Lechiche(2), G.Leguelinel-Blache(1), A.Sotto(2)
(1) Pharmacy, (2) Infectious and tropical diseases department, Caremeau Hospital, Nîmes, France

BACKGROUND / PURPOSE
Acute community-acquired pneumonia (CAP) is a widespread infection worldwide, causing many hospitalizations and deaths. The repeated and inappropriate use of antibiotics is the main cause of the emergence of bacterial resistance that can lead to therapeutic dead ends.

This study assessed the pharmacological management of CAP in community and hospital settings, according to the applicable national standards (NS).

MATERIAL AND METHODS
- Retrospective and observational study performed over one year in 13 short-stay wards in a 2000 bed-health facility
- The patients included had a CAP previously treated in community (each patient could be treated with one or more antibiotic therapies).
- Two infectious physicians and a senior clinical pharmacist analyzed the compliance of antibiotic orders to NS for the medication choice (M), the medication dosage (P) and the treatment duration (D).

RESULTS
A total of 204 patients were included.

Rate of patients with at least one non-compliance among the 3 criteria analyzed

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Community (n=187 patients)</th>
<th>Hospital (n=181 patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>67.9%</td>
<td>45.9%</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Characterization of these non-compliances (n = number of antibiotic therapies)

CONCLUSION
Non-compliance to NS for antibiotic therapies can be explained by the multiplicity of prescribers, a lack of communication, a difficult access to clinico-therapeutic recommendations, microbiological information and medical imagery tests. There is an urgent need to strengthen continuous training and to set up better coordination of care between community and hospital health professionals.

Other works published in literature on the rate of intra-hospital nonconformities present results similar to ours. This innovative study reminds us of the importance of respecting the recommendations for optimal recovery of patients with CAP, avoiding multiple re-hospitalizations and preserving the efficiency of the existing antibiotic arsenal.