

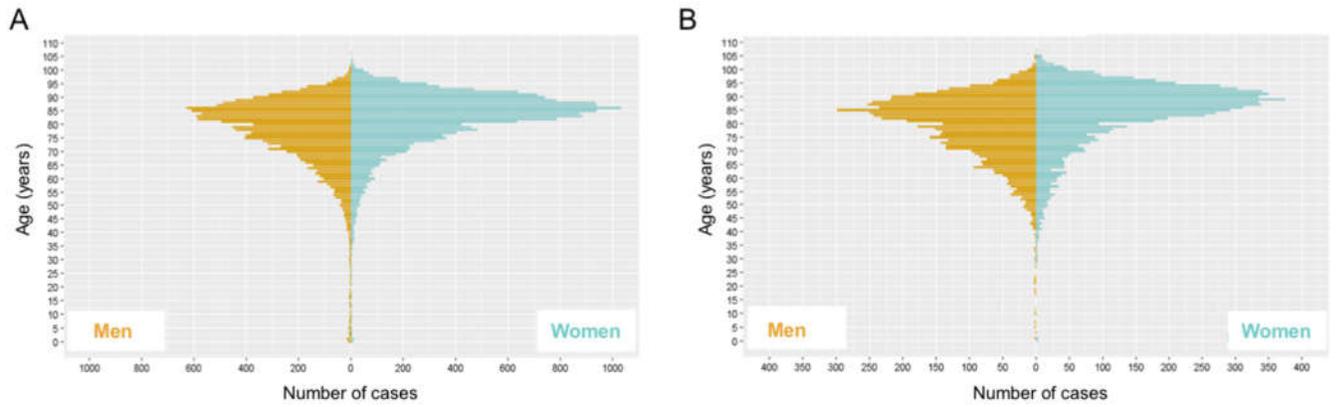
**Supplementary File for the submission by Santa Eugènia et al. “Characteristics and Service Utilization by Complex Chronic and Advanced Chronic Patients in Catalonia: A Retrospective Seven-year Cohort-Based Study of an Implemented Chronic Care Program.”**

## Supplementary Tables

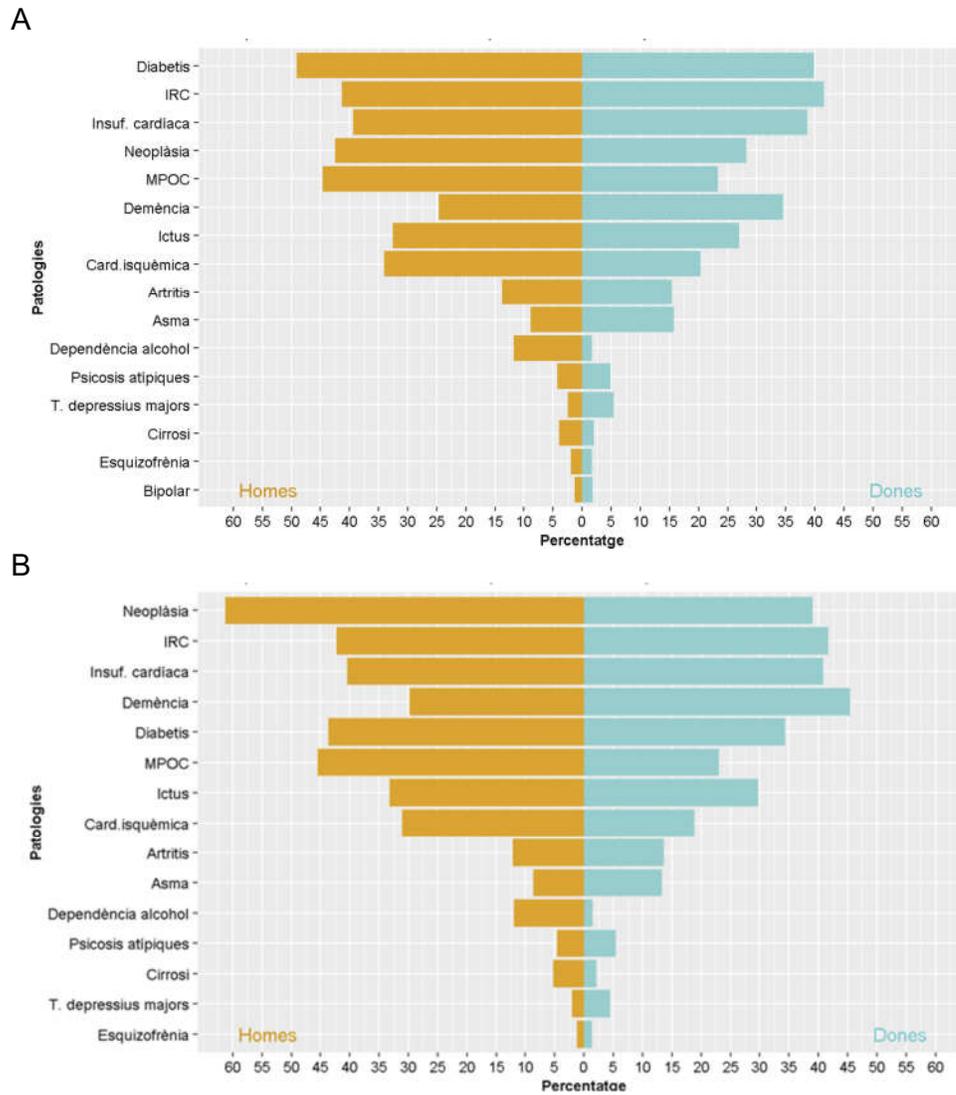
<b>Type of Complexity</b>	<b>Definition</b>	<b>Criteria<sup>a</sup></b>
<b>Clinical Complexity</b>	<p>Interaction between multiple disease-related factors. E.g. Diagnosis, severity, symptoms with difficult control, multimorbidity, and associated disability degree.</p> <p>For healthcare professionals, disease-related factors usually influence two interrelated conditions, difficulty for accurate diagnosis and for decision-making, determining clinical complexity.</p>	<ul style="list-style-type: none"> <li>▪ Multimorbidity: Single Chronic severe or progressive pathology. Rare diseases.</li> <li>▪ Dynamic evolution.</li> <li>▪ Geriatric syndromes with severity/progression criteria (e.g., polypharmacy, cognitive determinant, and frailty).</li> <li>▪ Intense, persistent and refractory symptoms.</li> <li>▪ High services use and healthcare resource consumption. High probability of decompensation.</li> <li>▪ Classification within the 5% higher risk according to the Adjusted morbidity group.</li> </ul>
<b>Contextual complexity</b> (social, psychosocial and familiar)	<p>Disease-generated social needs and psychosocial discomfort that may worsen or hamper management of clinical complexity.</p> <p>Risky social function (i.e., dysfunctional) to meet health needs within the same social support network due to the impact of social and psychosocial risk factors.</p>	<p>Risky or dysfunctional social situation to meet needs in one or more of the following areas:</p> <ul style="list-style-type: none"> <li>▪ Organization of care.</li> <li>▪ Family unit and/or caregivers.</li> <li>▪ Family cohesion and affective climate.</li> <li>▪ Structural, safety, comfort and privacy conditions.</li> <li>▪ Social and setting network.</li> </ul>
<b>Complexity associated with the healthcare system</b>	<p>Given the multiple possible responses to the complexity challenge, paradoxically, the system may become a source of complexity, not necessarily solved by increased resources and services. Increased services and healthcare professionals may lead to complexity due to the generation of multiple possible</p>	<ul style="list-style-type: none"> <li>▪ Benefit of multidisciplinary management. Need to access different services.</li> <li>▪ Uncertainty in decision-making and doubts regarding management. Discrepancies among different professionals or teams regarding clinical management.</li> </ul>

	pathways, uncoordinated responses, duplicities, and gaps in the healthcare continuum.	▪ Benefit of integrated care strategies.
<p><sup>a</sup>unequivocal guidelines regarding criteria, their number, or combinations that need to be met to be considered a chronic complex patient have not been established. Healthcare professionals may deem management of a case as particularly difficult due to a sufficient number of criteria met, validate them clinically, and identify the patient as chronic complex. A person failing to meet any of the criteria is unlikely to have complex care needs.</p>		

## Supplementary Figures



**Figure S1.** Age and sex distribution of prevalent cases of (A) CCPs and (B) ACPs in 2019.



**Figure S2.** Main comorbidities of prevalent cases of (A) complex chronic (CCP) and (B) advanced chronic (ACP) patients by sex. Year 2019.