

## **O68 Functional change trajectories in patients with chronic kidney disease: A growth mixture model analysis**

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**Objective:** To explore the longitudinal functional trajectories in patients with chronic kidney disease (CKD) at four time points and to identify the sociodemographic and disease characteristics of different trajectories.

**Methods:** A longitudinal study was conducted among 143 patients with CKD. PROMIS® short forms, including physical function 4a and ability to participate in social roles and activities 4a, were used to assess physical and social functions at four time points: newly diagnosed (T1), one month after diagnosis (T2), two months after diagnosis (T3), three months after diagnosis (T4). Growth mixture model was used to identify functional change trajectories, followed by logistic regression analysis to identify the factors.

**Results:** Three physical function trajectories and two social function trajectories were identified, respectively. For physical function trajectories: high function maintenance group (46, 32.0%), high function slightly deterioration group (88, 62.0%), low function deterioration group (9, 6.0%). For social function trajectories: high function maintenance group (123, 86.0%) and low function alleviation group (20, 14.0%). Patients' age and whether they had diabetes were associated with physical function trajectory group membership. Younger patients were more likely to be classified into the high physical function maintenance group compared to the high function slightly deterioration group ( $p=0.001$ , OR=0.074). Patients with diabetes were more likely to fall into the low-function deterioration group ( $p=0.021$ , OR=14.320). The relationship between the primary caregiver and the patient was associated with social function trajectory group membership. Patients whose primary caregiver was themselves were more likely to be in the high physical function maintenance group ( $p=0.005$ , OR=0.040).

**Conclusions:** Distinct physical and social function trajectories were observed in patients with CKD. Age, diabetes status, and caregiver relationship were significant predictors of trajectory group membership. Targeted interventions based on these factors should be conducted to help improve or maintain patients' functional outcomes.