# Impact of Frailty Risk in Older Hospitalized Patients

**Primary Researcher:** Ryo Momosaki
Professor, Mie University Graduate School of Medicine
**Co-researchers:** Kenta Ushida
Student, Mie University Graduate School of Medicine
Shinsuke, Hori
Student, Mie University Graduate School of Medicine

The purpose of this study was to verify the utility of a frailty risk assessment tool for older hospitalized patients. In this study, a retrospective cohort study of older patients with pneumonia, vertebral compression fracture, and traumatic brain injury was conducted using DPC data from JMDC. The Hospital Frailty Risk Score (HFRS) was calculated based on comorbidities at admission, and patients were classified into three groups: low risk (HFRS < 5), intermediate risk (HFRS 5-15), and high risk (HFRS > 15). In patients with pneumonia, the intermediate- and high-risk groups had longer days to start oral intake and longer hospital stays than the low-risk group. In patients with vertebral compression fractures, the intermediate-risk group was independently associated with in-hospital mortality. The intermediate- and high-risk groups also had smaller improvements in ADLs than the low-risk group. In traumatic brain injury patients, the intermediate- and high-risk groups had longer hospital stays and smaller ADL changes than the low-risk group. This study shows that frailty risk assessment based on DPC data could be used to predict outcomes in hospitalized patients.