

# Progression and trajectory network of age-related functional impairments and their combined associations with mortality: a two-decade prospective study

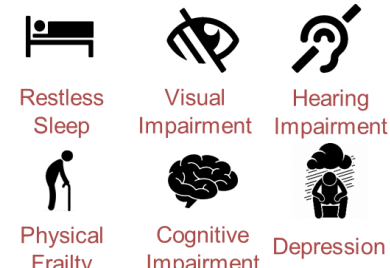
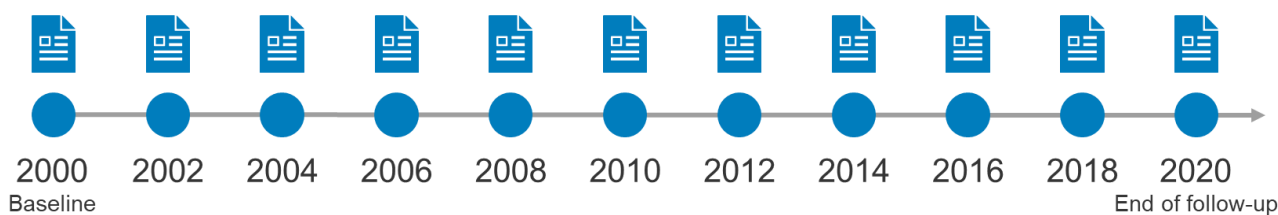
**HRS**

HEALTH AND  
RETIREMENT  
STUDY

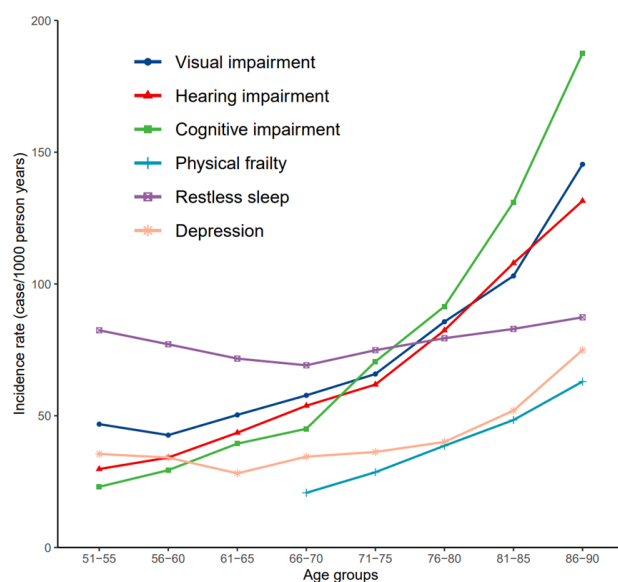


- 2015 born in 1942-1947 from WB
- 9315 born in 1931-1941 from HRS
- 2071 born in 1924-1930 from CODA
- 4513 born before 1924 from AHEAD

Functional impairments measured repeatedly for up to 20 years

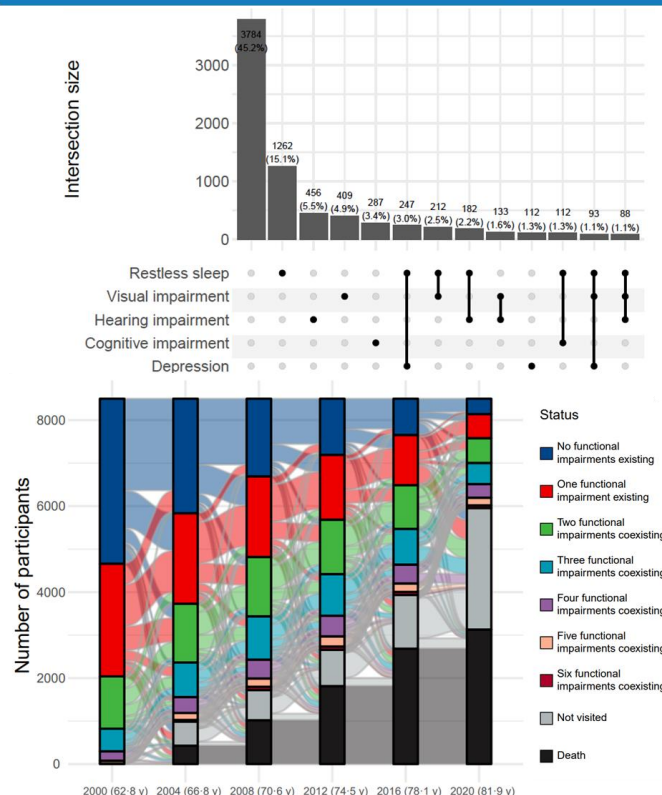


## Age- and sex-specific incidence



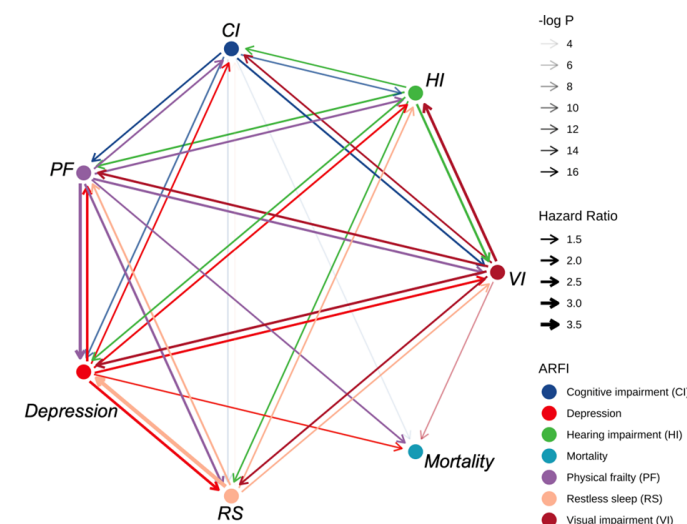
- Incidence rates of most functional impairments increased exponentially with age (51-90 years).
- Incidence rates of restless sleep and depression increased less rapidly with age (51-90 years).

## Co-occurrence and progression



- Functional impairments showed age-specific patterns of co-occurrence and progression.

## Hazard trajectory



- Functional impairments were mutually bidirectionally linked as a network.
- Physical frailty, depression, visual impairment, and cognitive impairment independently predicted higher mortality risk.