Supplemental file 2:

1. Sociodemographic Characteristics
After recoding, the socio-demographic variables of this study include: gender (male = "1"; female = "2"), age (under 60 years old = "1"; 60 years old and above = "2"), address (the center of city/town = "1"; combination zone between urban and rural areas = "2"; village = "3"), marital status (married and living with spouse = "1"; married but not living with spouse/divorced/widowed/never married = "2"), education (illiterate = "1"; primary and secondary school = "2"; high school and above = "3"), personal income (yes = "1"; no = "0"), medical insurance (yes = "1"; no = "0") and pension (yes = "1"; no = "0").

2. Health Status
The health status variables mainly include self-rated health, health satisfaction, comorbid conditions, hypertension, diabetes, heart disease, lung disease, stroke treatment, falls, pain and ability to work. We recoded them as follows. The self-rated health was divided into three options (good = "1"; fair = "2"; poor = "3"); health satisfaction was recoded in the same way as life satisfaction (satisfied = "1"; not satisfied = "0"); The comorbid conditions were divided into three categories: without other chronic diseases = "0", with one chronic disease = "1", with two or more chronic diseases = "2"); Work ability is expressed as the degree to which normal work is affected by physical health reasons (unable to work = "1"; unable to work for a long time = "2", works properly = "3"). Other variables in this section are coded as dichotomous variables (yes = "1"; no = "0").

3. Lifestyles and social activity
The variables in this part mainly include: smoking (smoking = "1"; no smoking / quit smoking = "0"), drinking (drinking = "1"; no drinking = "0"), physical activity (yes = "1"; no = "0") and social activity (yes = "1"; no = "0").

4. Family Relationships
The relationship with spouses, the relationship with children and the number of children are selected as three variables in this section. Among them, the relationship with spouses (children) is divided into three categories: satisfied = "1"; no spouse (children) = "2"; not satisfied = "3". The number of children is divided into 0, 1 to 3 and more than 3.