

### Additional file 3. Knowledge graph construction

➤ The health examination items from different regions.

| Type        | Hospital grade   | Region          | Name                                                              |
|-------------|------------------|-----------------|-------------------------------------------------------------------|
| Institution | —                | Northern China  | Beijing Physical Examination Center                               |
| Hospital    | tertiary grade A | Northern China  | Chinese People's Liberation Army General Hospital                 |
| Hospital    | tertiary grade A | Southern China  | Chinese People's Liberation Army General Hospital Hainan Hospital |
| Hospital    | tertiary grade A | Eastern China   | The First Affiliated Hospital of Zhejiang University              |
| Hospital    | tertiary grade A | Eastern China   | The Second Affiliated Hospital of Zhejiang University             |
| Hospital    | tertiary grade A | Northwest China | Ningxia Medical University General Hospital                       |

➤ The book named “Health Examination and Health Management” provided part of the decision-making knowledge of health examination items.

