



Human Resources for Health in Rural China

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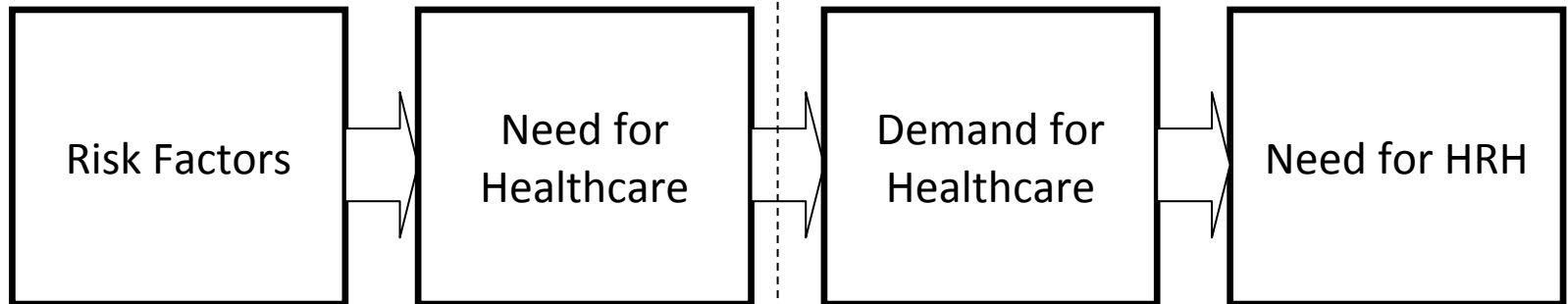


Objectives

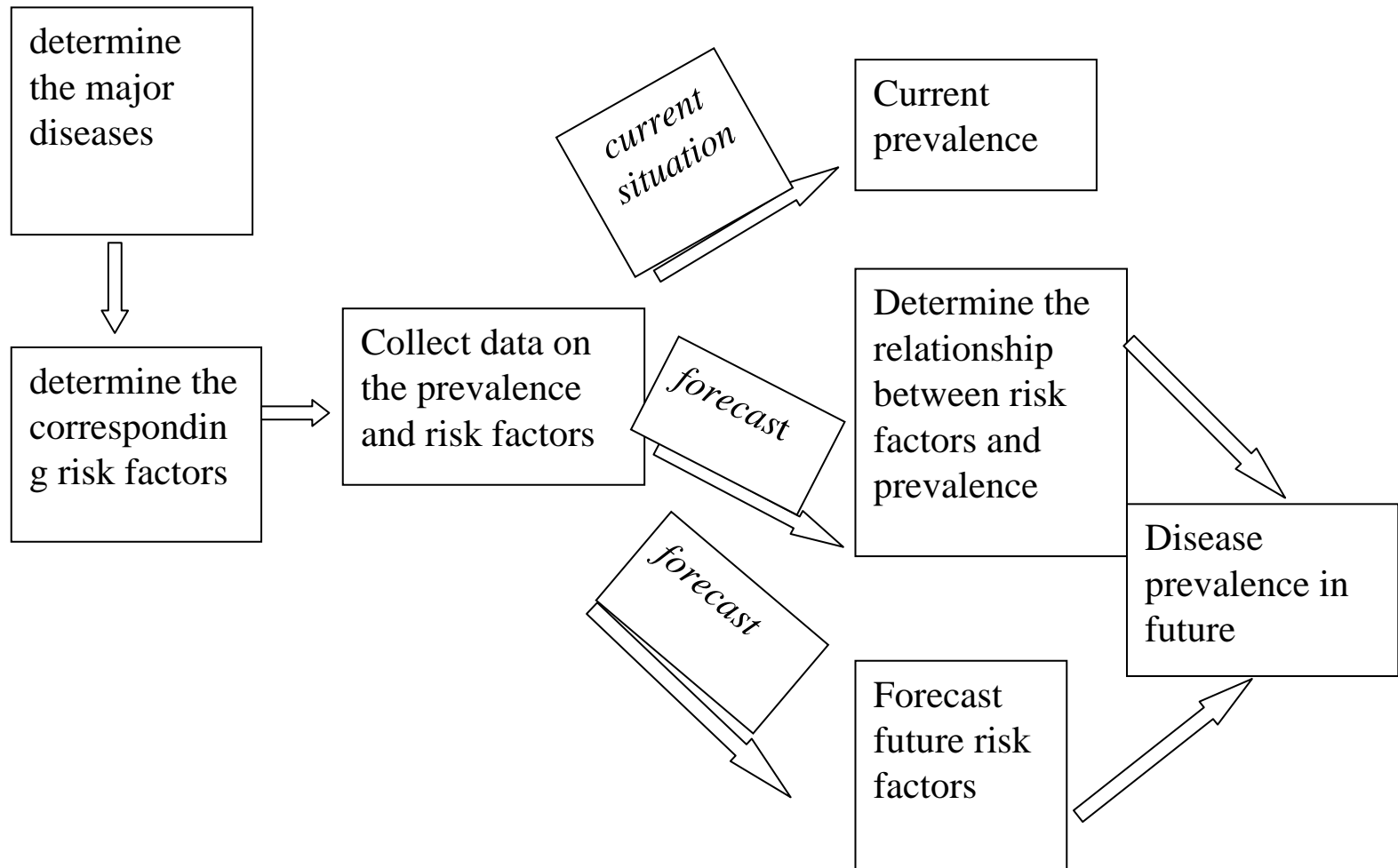
- To predict the demand for HRH in rural China in the next 15 years (until 2025) on the basis of a understanding of current HRH situation in rural China.
- Providing policy recommendations ;
- To establish a scientific evidence-based method to predict HRH demand

Methodology

Logical Block 1 (today's topic)



Methodology of Logical Block 1



Screening

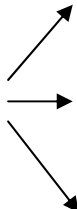
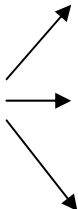

Diseases and Risk Factors

- Screening Diseases:
 - The screening criteria are based on 2 indicators, **mortality** and **burden of disease**.
 - **17 categories and 62 specific kinds of diseases**, that significantly affect health outcomes and consume most health services especially in terms of human resources, have been selected.
- Screening Risk Factors:
 - we search the related references and use the systematic review to determine the risk factors.
 - About 750 papers have been reviewed.
 - further literature search is ongoing, we expect larger number (up to 10,000) of papers to be found on some major diseases such as CHD.
 - 37 risk factors have been selected

Diseases Selected

1 Malignant Neoplasms (恶性肿瘤)	10 Gynecological disease (妇科疾病)
2 Respiratory Diseases(呼吸系统疾病)	11 Gynecological disease (妇科疾病)
3 Circulatory System Diseases (循环系统疾病)	12 Hysteromyoma (产科疾病)
4 Digestive Diseases (消化系统疾病)	13 Paediatric Disease (儿科疾病)
5 Endocrine Diseases (内分泌疾病)	14 Oral Conditions (口腔科疾病)
6 Genitourinary Diseases (泌尿生殖系统疾病)	15 Nutritional Deficiencies 营养缺乏
7 Nervous System Diseases (神经系统疾病)	16 Musculoskeletal diseases (骨骼肌肉疾病)
8 Mental Disorder (精神障碍)	17 Sensory Dysfunction (感官功能障碍)
9 Injuries and Poisonings(损伤及中毒)	

Risk Factors

Distal Causes		Proximal causes		Physiological causes		Outcomes
Environmental factors Social and economic factors		Behavior factors Psychological factors		Physical factors		17 categories and 62 specific kinds of diseases

Pilot Survey (8.24~8.28,2009)

-Sample

- ▶ **2** Counties: Ganyu in Jiangsu Prov., Kaiyuan in Liaoning Prov.
- ▶ **5~6** towns in each county (stratified into 3 classes by economic condition)
- ▶ **2** villages for household survey in each town
- ▶ About **20** households in each village

County	Institution			Community	Household
	County Level	Township Hospitals	Village Clinics	Number of Villages	Number of Household
Kaiyuan (Liaoning Prov.)	County Hospitals; TCM Hospitals; Maternal and Child Care Service Centres; CDCs;	6	46	10	108
Ganyu (Jiangsu Prov.)	Bureau of Health Supervision; Health Bureau.	6	36	12	125
Total	-	12	82	22	233

Pilot Survey (8.24~8.28,2009)

-Questionnaire

1) Basic Info of the Household

Number of Household Members	Health Insurance
Income, Expenditures, and Assets	

2) Household Members' Demographic Background

Gender	Date of Birth	Race
Marital status	Education	Occupation
Self-Assessment Health (EQ-5D Scale)		

3) Risk Factors

Smoking	Drinking,	Exercise
Diets	Mental Health (K6 Scale)	Maternal and Child Health
Personal History; Family History	Height and Weight, Blood Pressure	Environment: House, Toilet, Water Source ; Indoor Pollution...

Sampling for Nationwide Survey

○ Sampling Method

- Multi-stage stratified random sampling: County-Township-Village-Household

○ Sampling Frame

- Set the 66 sample counties chosen by the 4th National Health Services Survey as the sampling frame (This frame would be expanded if necessary)

○ Geographical Stratification

- dividing the sampling frame into 7 groups by using the *land classification scheme* (Zhao Songqiao, 1983), according to the geographical and climatic factors

○ Economic Stratification

- dividing the counties into two groups in the same geographic area, the developed areas and the underdeveloped ones, according to economic factors

○ Matched Pair Method

- Selecting a developed county and an underdeveloped one as a pair within each geographic region, in favor of the *matched pair study*. We expect 14 counties (including county-level cities) totally to be drawn

Discussion on Sampling

○ **About Geographical Stratification**

- Is there any Geographical stratification way which is more suitable for this research?
- How to deal with those counties which are cross-regional?
- Is it necessary to supplement a few of counties besides the 66 ones?

○ **About economic Stratification**

- What kind of indicators are suitable for our research?



Thank you!