



The  
University  
Of  
Sheffield.



## **UK-China Health and Economy Partnership**

### **Valuing health outcomes for health technology assessment**

# **Masterclass Report**

**17-18 November 2020 | Jinan, China**

# UK-China Health and Economy Partnership

## 中英健康医疗 与经济合作项目



## Executive summary

**The UK-China Health and Economy Partnership (UK-CHEP) promotes long-term collaboration between UK and Chinese universities by focusing on the economics of healthcare for the mutual benefit of the two countries. GlaxoSmithKline (GSK) assisted in the development of the partnership and has provided funding to ensure its success.**

A masterclass led by the universities of Shandong and Sheffield was held at Shandong University on 17th and 18th November, 2020, overseen by the British Council. Its aim was to create measurable benefits for Chinese patients and the economy by generating new health economics expertise.

Professor Darrin Baines from Bournemouth University gave an introduction of the partnership. Academics from the University of Sheffield, Leeds University, University of York and three Chinese universities – Zhejiang, Fudan and Shandong – joined the masterclass.

The two day masterclass title was “Valuing health outcomes for health technology assessment”. It explored how health outcomes can be measured and valued for use in health technology assessment. This topic is an area of expertise for both Sheffield and Shandong Universities. Presentations were given by world leading experts in health valuation methodologies and the sessions were chaired by partnership leads, Professors Sun Qiang (Shandong University) and Simon Dixon (University of Sheffield).

A masterclass website was developed that provides details of the event, copies of the presentations and supporting materials, including videos, on key topics.

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## Introduction

The UK-China Health and Economy Partnership (UK-CHEP) promotes long-term collaboration between UK and Chinese universities by focusing on the economics of healthcare for the mutual benefit of the two countries. GlaxoSmithKline (GSK) assisted in the development of the partnership and has provided funding to ensure its success.

The universities participating in UK-CHEP are:

- Zhejiang University
- Fudan University
- Shandong University
- Bournemouth University
- Leeds University
- University of York
- University of Sheffield

UK-CHEP supports participating universities to generate research-led technical advice and capacity in health economics that focuses on:

- Supporting participating universities in achieving the aims of the Chinese government's Double First Class programme;
- Completing joint projects that support and generate world-class research that improves the Chinese population;
- Supporting students and academic staff from China to engage in short-term and long-term study and exchange at UK institutions, and vice versa;
- Jointly deliver activities and workshops to develop academic capacity and attainment;
- Promoting partnerships between UK and Chinese universities that operate successfully during the COVID-19 pandemic.

In line with this, the masterclass was designed in order to:

- Support UK-CHEP participating universities so they can work together to create significant impact for both the British and Chinese people and economies by engaging in long-term projects and knowledge collaborations that generate new expertise in health economics.
- Help build mutual understanding and deepen and broaden collaboration between participating universities by sharing research and educational opportunities that help deliver the goals of China's "Double First Class" programme.

## Masterclass leaders



**Professor Sun Qiang, Professor of Health Economics at Shandong University, said:**

“UK-China Partners have overcome the COVID-19 pandemic and have worked together to deliver this masterclass programme again to strengthen the development of health economics and evaluation in China. I believe this work will also contribute to the overall collaboration between UK and China universities.”



**Professor Darrin Baines, Professor in Health Economics at Bournemouth University, said:**

“This masterclass will help secure significant impact upon health and economic outcomes by improving patient quality of life through better and faster access to cost-effective medicines and promoting world-class research and education in keeping with China's 'Double First Class' programme.”



**Professor Simon Dixon, Professor of Health Economics at the University of Sheffield, said:**

“I am grateful that colleagues in the UK and China have come together to deliver an excellent masterclass programme at Shandong University and online. I am confident this will mark the start of lasting research and teaching collaborations. I also thank GSK for their contributions to the partnership.”

## Masterclass presentations

### Welcome

Professor Sun Qiang,  
Shandong University

### Introduction to the Masterclass

Professor Darrin Baines,  
Bournemouth University

### Key issues when measuring and valuing health: a European and North American perspective

Professor Simon Dixon,  
University of Sheffield

### The development, use and future of the SF-6D

Professor John Brazier,  
University of Sheffield

### Introduction and comparison of MAU instruments

Professor Shunping Li,  
Shandong University

### Similarities and Differences in HRQOL concepts between China and the West

Dr Zhuxin Mao,  
Shandong University

### Measuring and valuing health for HTA in children

Professor Simon Dixon,  
University of Sheffield

### E-QALY project

Professor John Brazier,  
University of Sheffield

### E-QALY in China

Dr He Xiaoning,  
Tianjin University



## Masterclass speakers

### Professor Simon Dixon

Simon leads the Sheffield component of UK-CHEP. He is an expert in economic evaluation and health technology assessment methods. He spent 10 years on a NICE Technology Assessment panel applying these methods to real world decision making. He leads modules on SchARR's Masters in Public Health (MPH) and MSc International Health Technology Assessment and Reimbursement.



### Professor Shunping Li

Shunping Li is the director of Center for Health Preference, Shandong University, deputy director of the Key Laboratory of Health Economics and Policy Research of National Health Commission. His main research interests include: (1) the design and analysis of discrete choice experiment for the quantification of stakeholder preferences for health and health care; (2) the measurement and valuation of health outcomes; (3) to assess the cost effectiveness of health related interventions and to contribute to the design and analysis of clinical trials.



### Professor John Brazier

John is one of the world's leading researchers in the field of preference-based measures. He developed the SF-6D over 20 years ago and has led the development of new methods and measures since that time. He is currently leading work on a new measure commissioned by the UK Department of Health and is collaborating with Chinese researchers to examine its validity in China.



### Dr Xiaoning He

Xiaoning He is an assistant Prof. in School of Pharmaceutical Science and Technology, Tianjin University, major in pharmacoeconomics. She visited Sheffield University from Sep 2019 and Mar 2020 as a visiting scholar. Her main research areas are real-world data analyses, pharmacoeconomic evaluations, and health utility measurement. She also worked as group members of China Pharmacoeconomic Guideline 2020, and several other Chinese textbooks of pharmacoeconomics in China.



### Dr Praveen Thokala

Praveen is an expert in decision analytic modelling and multi-criteria decision analyses (MCDA). Praveen has undertaken modelling on numerous projects for NICE, ICER and the National Institute for Health Research. He was Chairman of the ISPOR MCDA Emerging Good Practices Task Force which produced good practice guidelines that are used throughout the world.



### Professor Darrin Baines

Darrin is a health economist with over 25 years' experience of delivering well-designed, professionally managed evaluation studies that meet funder needs and help improve patient lives. He specialises in health policy and the evaluation of health systems and is published widely in international journal. Professor Baines is currently the coordinating lead of the UK-China Health and Economy Partnership, as well as the academic lead of a British Council funded Newton project currently transferring health economics expertise to pharmacists in Egypt.



### Professor Sun Qiang

Qiang Sun leads the Shandong component of UK-CHEP. He serves as the chief expert of the key new think tank (health management and policy research) in Shandong Province and the deputy chairman of the Public Health Economics Branch of the Chinese Health Economics. He is an expert in health economy and health policy. Over the past two decades, he has been committed to promoting the rational use of antibiotics, conducting health economic evaluation, and accelerating the reform of medical insurance payment methods. His series of research results provide a strong basis for the formulation of national health policy.



### Dr Zhuxin Mao

Mao Zhuxin graduated with the Master's degree with distinction in business and economics from University College London in 2016 and just obtained her PhD degree in health economics from Academic Unit of Health Economics, University of Leeds, 2020. Her PhD research was about exploring cultural differences in defining and measuring health between China and the West. Her key research areas include health-related quality of life & patient reported outcomes, health status measurement & evaluation and patient preference. Upon graduation, Zhuxin will continue to conduct health economics and outcome research in China and internationally.



## Masterclass delegates

Name	Affiliation
Sun Qiang	Shandong University
Li Shunping	Shandong University
He Xiaoning	Tianjin University
Mao Zhuxin	University of Leeds
Xi Xiaoyu	China Pharmaceutical University
Sun Hui	Shanghai Health Development Research Center
Zhu Lin	Shanghai Health Development Research Center
Yang Nan	Sichuan University
Ling-Hsiang Chuang	
Yin Jia	Shandong University
Zhen Xuemei	Shandong University
Doulei	Shandong University
Yang Ding	Shandong University
Huang Li	Shenyang Pharmaceutical University
Liu Kaijie	Zhejiang University
Chen Pinan	Tianjin University
Wang Xiaoyu	Fudan University
Huang Yuankai	China Pharmaceutical University
Xie Shitong	Tianjin University
Zhao Zixuan	Zhejiang University
Yang Wenqianzi	Zhejiang University
Wu Weijia	Zhejiang University



Name	Affiliation
Deng Shijiao	Fudan University
Wu Boshan	Fudan University
Tang Yuekun	Fudan University
Lin Tengfei	Jinan University
Xiang Yuliang	Sichuan University
Cao Fankun	Shandong University
Rong Xuejing	Shandong University
Mu Qingna	Shandong University
Wang Ting	Shandong University
Li Hongyu	Shandong University
Shen Liyan	Shandong University
Huo Ruiting	Shandong University
Meng Xiaoqing	Shandong University
Ding Yi	Shandong University
Liu Lihua	Shandong University
Liu Xiaoqi	Shandong University
Shi Zhao	Shandong University
Wang Jianglin	Shandong University
Yang Huizhi	Shandong University
Du Huimin	Shandong University
Si Huiyan	Shandong University
Zhang Qinyu	Shandong University
Huo Fuhao	Shandong University



## Other masterclass resources

A masterclass website was developed to provide additional resource relating to the valuation health outcomes for health technology assessment. The website includes copies of all the presentations together with further supporting materials. Of particular note are a series of eight videos produced by the University of Sheffield for its Massive Open Online Courses (MOOCs). These cover the following key topics.

- What is a QALY?
- Using QALY information in decision making
- Developing a PROM
- The challenge of creating a generic measure of HRQOL
- Who should value child outcomes?
- Valuing Health States in Practice
- Case study of a utility measure: the SF-6D
- Case study of a child utility measure: the CHU9D

Additionally, information on Masters courses at Shandong University and the University of Sheffield are provided. A targeted reading list is also provided for those wishing to develop their knowledge of this topic yet further.

The website and resources can be found at:  
[sheffield.ac.uk/scharr/research/themes/valuing-health/uk-china-partnership-workshop](https://sheffield.ac.uk/scharr/research/themes/valuing-health/uk-china-partnership-workshop)







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