

# QIANG (NEAL) HAO

501F Ford Building, Penn State University,  
University Park, PA 16802  
qxh49@psu.edu; (716)-387-1697

## EDUCATION

---

### **Ph.D. Student in Health Policy & Administration (Health Economics Track)**

The Pennsylvania State University, University Park

Aug 2018 - Present

### **Master of Science in Economics.**

University at Buffalo, the State University of New York

May 2018

### **Bachelor of Arts in Economics.**

University of Colorado Denver

Dec 2015

## SKILLS

---

**Programming & Analytics:** STATA, TreeAge, SAS (SAS Certified Base and Advanced Programmer for SAS 9), R Studio, Microsoft Excel, Matlab, Tableau

**Datasets Used:** HCUP, NCDB, Clinical EMR, MEPS, DSS Clinical financial billing data and claims data

## RELATED COURSEWORK

---

**Health Services Research Methods:** Foundations of Research Methods in Health Services Research, Introduction to Research Design in Health Services Research, Research Methods in Health Services Research, Health Data Analysis for Research, Principles of Epidemiology

**Health Economics:** Health Economics, Economics Applications in Health Services Research, Advanced Methods in Health Services Research

**Cost-Effectiveness Analysis:** Decision Analysis, Valuing Healthcare: Policy and Practice

## RESEARCH/WORK EXPERIENCE

---

### *Research Assistant, Aug 2018-Present*

**The Pennsylvania State University, Department of Health Policy & Administration, Park, PA**

Work with advisors and surgeons on multiple advanced healthcare analytic projects and gain knowledge and experience on health economics and outcomes research, cost-effectiveness and decision analytic modeling.

- Work on project of Do-Not-Resuscitate Orders and Outcomes for Patients with Pancreatic Cancer. Conduct literature reviews, quantitative analyses, and prepare manuscripts for submission to peer-review journals.
- Collaborate with others on project of Cost-Effectiveness of Sentinel Lymph Node Biopsy for T1-T2 Head and Neck Cancer. Construct decision trees, Markov models, and cost-effectiveness analyses compare different biopsies. (Mentor: Christopher S. Hollenbeak, PhD)

### *Dissertation in development, Aug 2020-Present*

**The Pennsylvania State University, Department of Health Policy & Administration, Park, PA**

- 2015 American thyroid association guidelines and outcomes for patients with thyroid cancer

- Surgical treatment for patients with low-risk thyroid cancer: a systematic review and meta-analysis
- Cost-effectiveness of total-thyroidectomy and hemithyroidectomy among patients with low-risk thyroid cancer  
[Committee: Christopher S. Hollenbeak, PhD (Chair)]

***Health Economics Research Intern, July 2021-Oct 2021***

**Teva Pharmaceuticals**, West Chester, PA

Work with global health economics & outcomes research team to assist cost-effectiveness of fremanezuman in the treatment of fibromyalgia.

(Mentors: Marko Mychaskiw, PhD; Sangtaeck Lim, MPH)

***Health Economics Research Intern, Jun 2017-Aug 2018***

**Geisinger**, Danville, PA

Worked with health economics investigators and their internal and external collaborators to assist research and evaluation of healthcare research and interventions. Projects include: 1. Economic Outcomes of Genomic Return of Results to MyCode Participants. 2. Economic and Health Outcomes Associated with Pre-eclampsia and Benefits of a New Diagnostic Test (Progenity). 3. Environmental scan of high-risk breast programs for developing a BRACE care model.

- Performed data cleaning and management including Geisinger EMR, DSS clinical financial billing data and claims data.
- Supported quantitative data analysis and using SAS including to conduct cohort matching and compare costs and healthcare utilization.
- Conducted literature research and synthesize of information on breast and ovarian cancer.

(Mentors: Susan R Snyder, PhD, MBA; Jing Hao, PhD)

***Research Assistant, Jan 2016-Aug 2016***

**Peking Union School of Public Health & U.S.-China Health Summit**, Beijing, China

Worked for Professor and Dean of Peking Union School of Public Health on various health services research projects. Projects include: 1. associations among variations in structure and process of care at public hospitals in China and health outcomes; 2. evaluation of nationwide quality of healthcare services; 3. a systematic review of hospital performance measurements and implementations to China; 4. Senior Health Executive Education Program.

- Conducted literature search to screen, abstract and summarize information for research project use, such as a literature search on the measurement instruments of hospital process of care and hospital performance evaluation.
- Performed data management and analysis using excel and statistical software SAS, such as managed and analyzed a comprehensive database including administrative data and surveys with physicians, nurses and patients from 136 public hospitals in 31 Provinces in China to evaluate whether there was improvement in quality of care and patients' satisfaction.
- Demonstrated patients' satisfactions utilized Tableau in order to learn trends and factors that impact on patients' satisfaction.
- Coordinated on meeting planning and organization; assisted in preparation and translation of training material; communicated with invited lecturers including experts from the Harvard University and leading hospitals in Boston.

(Mentors: Yuanli Liu, PhD; Jing Ma, MD, PhD)

***Research Assistant, May 2015-Dec 2015***

**Foreign Economic Cooperation Center, Ministry of Agriculture**, Beijing, China

- Implementation and evaluation of multiple experimental agricultural development intervention programs at pilot communities. Planned and organized meeting; wrote expert meetings' minutes and assisted in meeting summary reports preparation. Collected information, including literature search and pilot community data. Collected information on the trend of agricultural bilateral trades between China and Australia.
  - Ministry's national agricultural performance review meeting. Collected data on each community's agricultural performance ratings evaluated by the attending experts and managed the database.
  - Assist in the international collaborative events with organizations such as the World Bank: Arranged itineraries and welcomed experts from international organizations.
- (Supervisors: Xueling Chu, PhD; Dali Geng, Director)

***Research Assistant, July 2012-May 2015***

**Department of Applied Economics, College of Economics and Management, China Agricultural University, Beijing, China**

- A study of food safety incidents in China 2000-2012. Collected detailed information including assigning classification of the causes of each food safety incident in China during the study period. Managed and cleaned the large dataset; conducted statistical data analysis; assistant in literature search and review; drafted part of the manuscript for journal publication.
  - Multi-national collaborative project on China dairy development. Led a group of students to survey and interview over 1000 families regards to their demographics, dairy product consumption and behaviors; abstracted data based on the survey and created and managed the database;
  - The economic burden of child maltreatment in the East Asia and Pacific region. Collected data, such as school dropout and unemployment rates of people who experienced childhood maltreatment, from National Bureau of Statistics of China and literature database such as National Knowledge Infrastructure
- (Mentor: Xiangming Fang, PhD)

## **WORKING PAPERS**

---

**Qiang Hao**, Joel E. Segel, Niraj J. Gusani, Christopher S. Hollenbeak. Do-Not-Resuscitate Orders and Outcomes for Patients with Pancreatic Cancer. (Manuscript in progress)

Karen Choi, **Qiang Hao**, Kathryn Carlisle, Christopher S. Hollenbeak, Stephen Lai. Cost-Effectiveness of Sentinel Lymph Node Biopsy for T1-T2 Head and Neck Cancer. (Manuscript in progress)

**Qiang Hao**, Christopher S. Hollenbeak. 2015 American Thyroid Association Guidelines and Outcomes for Patients with Thyroid Cancer. (Manuscript in progress)

**Qiang Hao**, Christopher S. Hollenbeak. Surgical treatment for patients with low-risk thyroid cancer: a systematic review and meta-analysis. (Research in progress)

**Qiang Hao**, Christopher S. Hollenbeak. Cost-effective of total-thyroidectomy and hemithyroidectomy among patients with low-risk thyroid cancer. (Research in progress)

## PUBLICATIONS

---

Snyder, S. R., Hassen, D., Rahm, A. K., Hao, J., Crissinger, S., **Hao, Q.**, Snyder, M., Leeming, R. (2021). Risk Assessment-Based Breast Cancer Screening Programs: A US Environmental Scan. *Ann Breast Cancer*. 2021; 4(1): 1016

Hao, J., Hassen, D., **Hao, Q.**, Graham, J., Paglia, M. J., Brown, J., Cooper M, Schlieder V, Snyder, S. R. (2019). Maternal and Infant Health Care Costs Related to Preeclampsia. *Obstetrics & Gynecology*, 134(6), 1227-1233.

Wei, J., Hu, Y., Zhang, L., **Hao, Q.**, Yang, R., Lu, H., Zhang, X., Chandrasekar, E. K. (2017). Hearing impairment, mild cognitive impairment, and dementia: a meta-analysis of cohort studies. *Dementia and geriatric cognitive disorders extra*, 7(3), 440-452.

Sun J., Liu Q., Chen Y., Wu L., **Hao Q.**, Hu S., Liu Y. (2016). International comparison of consumer satisfaction with inpatient services. *Chinese Journal of Hospital Administration*, 32(06): 433-437. (Article in Chinese)

## CONFERENCE PRESENTATIONS (Presenters are underlined)

---

**Qiang Hao**, Joel E. Segel, Christopher S. Hollenbeak. “2015 American Thyroid Association Guidelines and Outcomes for Patients with Thyroid Cancer”, poster presentation accepted by ISPOR, May 15-18, 2022, Washington DC.

**Qiang Hao**, Joel E. Segel, Christopher S. Hollenbeak. “The 2015 American Thyroid Association Guidelines Increased Hemithyroidectomy Rate in Patients with Thyroid Cancer”, poster presentation accepted by AcademyHealth Annual Research Meeting, June 14–17, 2021, Virtual–Online.

**Qiang Hao**, Joel E. Segel, Niraj J. Gusani, Christopher S. Hollenbeak. “Do-Not-Resuscitate Orders and Resource Use in Patients with Pancreatic Cancer”, podium presentation accepted by AcademyHealth Annual Research Meeting, July 28–August 6, 2020, Virtual–Online.

**Jing Hao**, Dina Hassen, **Qiang Hao**, Jove Graham, Michael Paglia, Kristina Blessing, Susan Snyder. “Preeclampsia cost of illness: maternal and infant healthcare costs”, Poster Presentation at International Society of Pharmacoeconomics and Outcome Research (ISPOR) 23rd Annual International Meeting, May 19-23, 2018, Baltimore, MD

**Dina Hassen**, Susan Snyder, Alanna Rahm, Deanna Jarrett, Samantha Crissinger, **Qiang Hao**, Rosemary Leeming. “Environmental Scan of High Risk Breast Cancer Programs”, Poster Presentation at AcademyHealth Annual Research Meeting, June 2-4, 2019, Washington, D.C.

## LEADERSHIP

---

Secretary, AcademyHealth Student Chapter, The Pennsylvania State University, 2020-2021