Hui Shao *M.D.,Ph.D.*

Current Address: 1225 Center Dr, Gainesville, FL 32610
Phone Number: (352)-294-8323
E-Mail: Raistlinshao@gmail.com

EDUCATION:

August 2012 ~ March 2017	PhD, Health Service Research and Economics *Tulane University, USA*
September 2010 ~ June 2012	MHA, Health Management and Policy *Shandong University, China*
September 2005 ~ June 2010	MD, Medicine/Endocrinology *Shandong University, China*

PROFESSIONAL EXPERIENCES:

Dec 2022-present	Associate Professor, Hubert Department of Global Health, Rollins School of Public Health, Emory University
May 2022-present	Director of Academics, CHPAMS
June 2022-present	Director, Data Analysis Working Group (DAWG), the DiCAYA network
Oct 2021-present	Adjunct Professor, Section of Endocrinology, Tulane University School of Medicine
Oct 2017-present	Adjunct Professor, Department of Global Health Management and Policy, School of Public Health and Tropical Medicine, Tulane University
Aug 2019-Nov 2022	Assistant Professor, Department of Pharmaceutical Outcomes and Policy, College of Pharmacy, University of Florida
Sept 2017-Jul 2019	PE Fellow, Division of Diabetes Translation, CDC, USA
Aug 2012-August 2017	Research Assistant, Tulane University, USA
May 2016-Sept 2016	Healthcare Informatics Consultant, Blue Cross and Blue Shield of Louisiana, USA
Jan 2011-June2012	Health Policy Consultant, Health Bureau of Jinan, China
Sep 2010-June 2012	Research Assistant, Shandong University, China
Sep 2009-January 2010	Clinical Resident, Transportation Hospital of Jinan, China
Jan 2010- June 2010	Healthcare Assistant, Community Health Center, Shandong, China

HONORS AND AWARDS

- *Sept 2022*   International Soceity for Cardiology and Cardiovascular Medicine

Best Researcher Award
- *Mar 2022*   Annals of Internal Medicine
  Top Reviewer in 2022
- *Jun 2021*   American Diabetes Association
  The President Selected Abstract
- *May 2021*   International Society of Pharma economics and Outcomes Research (ISPOR)
  "Top 5" abstract awards
- *Apr 2020*   Centers for Disease Control and Prevention
  HERG Kaafee Billah Award
- *May 2019*   Centers for Disease Control and Prevention
  Early Career Innovator Award
- *Jun 2018*   American Diabetes Association
  Travelling Grant
- *Jan 2017*   Patient Access Network (PAN) challenge
  Honored Award
- *Jun 2016*   International Society of Pharmacoeconomics and Outcomes Research (ISPOR)
  Best Student Podium
- *Jun 2014*   Academy Health Annual Research Meeting, San Diego
  Best Student Poster
- *Feb 2013*   School of Public Health and Tropical Medicine, Tulane University
  Dean's Award for Research

GRANTS AND CONTRACTS

Ongoing Research Support

NIDDK R01DK133465   **Shao (Contact PI) /Guo**   **09/01/2022 - 08/30/2026**

Building Equity Improvement into Quality Improvement in the use of New Glucose lowering Drugs through Individualized Drug Value Assessment in People with Diabetes
Through causal AI methods, this project will identify clinically high-benefit T2D patient subgroups for newer glucose-lowering medications, and generate empirical economic evidence for designing policy-level interventions to improve the quality of care and health equity in diabetes care.
Role: Principal Investigator

U18DP006711   **Shao (Contact PI)/ Phillips**   **09/01/2022 - 08/31/2027**

Assessing Barriers and Facilitators for Participating Structured Lifestyle Intervention and its Real-world Effectiveness and Cost-Effectiveness among US Veterans
The objective of this proposed project is to leverage electronic health records and advanced AI methods (e.g., NLP for clinical notes) to identify barriers and facilitators to the enrollment and completion of the NDPP, and evaluate its long-term effectiveness and cost-effectiveness through ***microsimulation***. Results generated from this study will fill critical knowledge gaps in implementing the NDPP in the US, thus helping to improve its future implementation.
Role: Principal Investigator

CDC U18DP006512   **Bian/ Shao (MPI)/ Guo/ Shenkman**   **9/01/2020-8/30/2025**

Assessing the Burden of Diabetes in Children, Adolescents and Young Adults (DiCAYA)

This study will build a surveillance system to monitor the prevalence and incidence of diabetes among children and adolescents using structured and unstructured data (NLP) from electronic health records.
Role: Principal Investigator

CDC U18DP006523   **Shi (PI)**   **09/30/2020-09/29/2025**
Louisiana Experiment to Address Diabetes: Zero-Dollar Copayment (LEAD-ZDC) for Improving Disease Management
This project seeks to examine if a zero-dollar copayment program in Blue Cross Blue Sheild of Louisiana will improve the care among patients with Diabetes and if it is cost-effective in a long run.
Role: Consortium PI

Pending Grant Proposals

Proposals to be Resubmitted
R01AG075104   Guo/Shao/Bian (MPI)   10/01/2022 - 09/30/2027
Planned Resubmission Date: July 2023

R21DK128743   Shao (PI)   01/01/2021 - 12/31/2022
Planned Resubmission Date: July 2023

Completed Research Support
CDC 20IPA2008335DPG   **Shao (PI)**   **7/01/2020-6/30/2022**
External advisor on microsimulation and machine-learning methods for program evaluation
This inter-agency agreement requests Dr. Shao's expertise as an external advisor in developing AI-driven prediction models and microsimulation algorithms and designing simulation experiments to support the CDC's program evaluation.
Role: Principal Investigator

University of Florida PROSPER award Shao(Contact PI) /DeRemer 1/23/2020-1/22/2021
Comparing Cardiovascular Benefits between GLP-1RA and SGLT2 Inhibitor Agents
This study compared the risk for cardiovascular complications between GLP-1RA and SGLT2i users who have T2DM and commercially insured by large health plans. We emulate the SUSTAIN-8 diabetes trial by following its trial protocol and applied an instrumental variable to adjust for selection bias.
Role: Principal Investigator

Sanofi AWD09175   **Shao (PI)**   **7/01/2020-1/31/2021**
Simulating Long-Term Outcomes for iGlarlixi using BRAVO Diabetes Model
This study estimated the 5-year risk for cardiovascular and microvascular outcomes associated with the use of iGlarLixi, using a microsimulation modeling approach. This award was initially given to Tulane Univerisity and then subcontracted to Dr. Shao's lab at UF.
Role: Principal Investigator

Health Action International APW19129   **Luo(PI)**   **10/01/2019-9/30/20**
Quantify insulin use and need in the USA 2020-2030.

This study seeks to quantify the Insulin use and need in the US 2020-2030. We used a matching technique to match individuals between NHANES data and data from the Medical Expenditure Panel Survey, to generate the simulation population. A simulation was then conducted using the simulation population to generate the future insulin need in 10 years.
Role: Co-Investigator

OCHSNER Health System   **Shi (PI)**   **8/01/17-7/30/19**
Diabetes Risk Prediction Model: A Demonstration Project using Electronic Medical Records and Insurance Claims.
The goal of this project was to develop a prediction model for diabetes-related complications using electronic health records extracted from a local healthcare system—the OCHSNER health system. We have compared the performance of this model against several other prediction equations and found that this prediction model has good performance when predicting diabetes complications in the same population the model was developed.
Role: Consultant

CDC 00HCUCGB-2018-23240   **Chen(PI)**   **4/01/2019-3/31/2020**
Effectiveness and cost-effectiveness of glucose-lowering medications in type 2 diabetes.
Using the data from the Action to Control Cardiovascular Risk in Diabetes, this study seeks to quantify the medication cost to achieve the different glycemic targets, stratified by baseline glycemic level.
Role: Consultant

PHS-CDC NCCDPHP 200-2016-92270   **Hoerger(PI)**   **8/01/2017-7/30/2021**
Developing and Validating two Computer Simulation Models to Predict the Long-term Health and Economic Outcomes of Interventions for Preventing Diabetes and its Complications.
This study will deliver two microsimulation models, predicting the lifetime complication risks for patients with T1DM and T2DM. We will also validate these two microsimulation models and calibrate them to national representative samples.
Role: Consultant

TEACHING EXPERIENCES:

Course Director

- *Applied Data Analysis and Interpretation*   2022 Fall
- *Principal of Pharmacoeconomics*   2022 Fall
- *Patient Care 8- Hypertension Module*   2022 Spring
- *Patient Care 5- Diabetes Module*   2022 Spring
- *Intro to Pharmaceutical Outcomes and Policy*   2022 Spring
- *Patient Care 3- Asthma Module*   2021 Fall
- *Applied Data Analysis, Interpretation and Reporting of Findings in Pharmacy*   2021 Fall
- *Principal of Pharmacoeconomics*   2021 Fall
- *Intro to Pharmaceutical Outcomes and Policy*   2021 Spring
- *Principal of Pharmacoeconomics*   2020 Fall
- *Patient Care 3- Asthma Module*   2020 Fall
- *Intro to Pharmaceutical Outcomes and Policy*   2020 Spring

- *Patient Care 3- Asthma Module*   2019 Fall
- *2018 China National Health Technology Assessment Training*   2018 Summer

MENTORING EXPERIENCE

PhD Students (on going)

Piaopiao Li	2020-Present
Sumaya Abuloha	2021-Present
Dawei Guan	2022-Present
Yushi Huang	2019-Present
Xinyu Zhang	2020-Present

Master Students (on going)

Shu Niu	2021-Present
Wenxi Huang	2021-Present
Khalid Alkhuzam	2021-Present
Alaa Alshehri	2021-Present

Doctoral Dissertation Committee (completed)

Yilu Lin	04/1/2022
Aram Babcock	10/21/2021

Master Thesis Committee (completed)

Dawei Guan	4/21/2022
Yahang Zhang	3/11/2021

PEER-REVIEWED PUBLICATIONS

(***Bold:** first/corresponding author)

1. **Shao H,** Shi L, Lin Y, and Fonseca V. "Using Modern Risk Engines and Machine Learning/Artificial Intelligence to Predict Diabetes Complications: A Focus on the BRAVO Model." Journal of Diabetes and Its Complications 36, no. 11 (November 1, 2022): 108316. https://doi.org/10.1016/j.jdiacomp.2022.108316.
2. **Shao H,** Guo J, Laiteerapong N, Tang S, Fonseca V, Shi L, and Zhang P. "Lowering Hemoglobin A1c Level to Less than 6.0% in People with Type 2 Diabetes May Reduce Major Adverse Cardiovascular Events: A Bayesian's Narrative." Current Medical Research and Opinion 0, no. 0 (September 26, 2022): 1–2. https://doi.org/10.1080/03007995.2022.2129234.
3. Gu S, Hu S, Zhen X, Shi L, Shao H, Sun X, Dong H. "Comparison of Glucose-Lowering Drugs as Second-Line Treatment for Type 2 Diabetes: A Systematic Review and Meta-Analysis." Journal of Clinical Medicine 11, no. 18 (January 2022): 5435. https://doi.org/10.3390/jcm11185435.
4. Wang Y, Zhang P, Shao H, Andes L, and Imperatore G. "Medical Costs Associated With Diabetes Complications in Medicare Beneficiaries Aged 65 Years or Older With Type 2 Diabetes." *Diabetes Care*, September 13, 2022, dc212151. https://doi.org/10.2337/dc21-2151.
5. **Shao H**, Guan D, Fonseca V, Shi L, Basu A, Pop-Busuim R, Ali M, and Brown J. "Economic Evaluation of the $35 Insulin Copay Cap Policy in Medicare and Its Implication for Future Interventions." *Diabetes Care*, September 12, 2022, dc221230. https://doi.org/10.2337/dc22-1230.
6. Kianmehr K, Guo J, Lin Y, Luo J, Cushman W, Shi L, Fonseca V, and **Shao H**. "A Machine Learning Approach Identifies Modulators of Heart Failure Hospitalization Prevention among Patients with Type 2 Diabetes: A Revisit to the ACCORD Trial." Journal of Diabetes and Its Complications 36, no. 9 (September 1, 2022): 108287. https://doi.org/10.1016/j.jdiacomp.2022.108287.
7. **Shao H**, Alsaleh A, Dex T, Lew E, and Fonseca V. "Cost-Effectiveness of IGlarLixi Versus Premix BIAsp 30 in People with Type 2 Diabetes Suboptimally Controlled by Basal Insulin in the US." Diabetes

Therapy 13, no. 9 (September 1, 2022): 1659–70. https://doi.org/10.1007/s13300-022-01300-5.

8. Lin Y, Shao H, Shi L, Anderson A, and Fonseca V. "Predicting Incident Heart Failure among Patients with Type 2 Diabetes Mellitus: The DM-CURE Risk Score." Diabetes, Obesity and Metabolism n/a, no. n/a. Accessed September 14, 2022. https://doi.org/10.1111/dom.14806.

9. **Shao H**, Guan D, Guo J, Shi L, Fonseca V, Brown J. "Projected Impact of the Medicare Part D Senior Savings Model (SSM) on Diabetes-Related Health and Economic Outcomes among Insulin Users Covered by Medicare." *Diabetes Care*, June 14, 2022, dc212601. https://doi.org/10.2337/dc21-2601.

10. Tang H, Shu Niu, Joshua Brown, Jingkai Wei, Shao H, Jiang Bian, and Guo J. "Newer Glucose-Lowering Drugs and Risk of Dementia: A Meta-Analysis of Cardiovascular Outcome Trials." *Journal of the American Geriatrics Society*. June 1, 2022. https://doi.org/10.1111/jgs.17895.

11. Kianmehr H, Zhang P, Luo J, Guo J, Pavkov M, Bullard K, Gregg E, **Shao H**. "Potential Gains in Life Expectancy Associated With Achieving Treatment Goals in US Adults With Type 2 Diabetes." *JAMA Network Open* 5, no. 4 (April 18, 2022): e227705. https://doi.org/10.1001/jamanetworkopen.2022.7705. **Altmetric Score: 315**

12. Park, Joohyun, Ping Zhang, Shao H, Michael Laxy, and Giuseppina Imperatore. "Selecting a Target Population for Type 2 Diabetes Lifestyle Prevention Programs: A Cost-Effectiveness Perspective." *Diabetic Medicine* n/a, no. n/a (n.d.): e14847. https://doi.org/10.1111/dme.14847.

13. Song, Hyun Jin, Ji Haeng Heo, Debbie L. Wilson, Shao H, and Haesuk Park. "A National Catalog of Mapped Short-Form Six-Dimension Utility Scores for Chronic Conditions in the United States From 2010 to 2015." *Value in Health* 0, no. 0 (March 30, 2022). https://doi.org/10.1016/j.jval.2022.02.011.

14. Spector E, Zhang Y, Guo Y, Bost S, Yang X, Prosperi M, Wu Y, Shao H, Bian J. Syndromic Surveillance Systems for Mass Gatherings: A Scoping Review. Int J Environ Res Public Health. 2022 Apr 13;19(8):4673. DOI: 10.3390/ijerph19084673.

15. **Shao H**, Kianmehr H, Guo J, Li P, Fonseca V, and Shi L. "Efficacy of IGlarLixi on 5-Year Risk of Diabetes-Related Complications: A Simulation Study." *Journal of Diabetes and Its Complications* 36, no. 3 (March 1, 2022): 108132. https://doi.org/10.1016/j.jdiacomp.2022.108132.

16. **Shao H**, Li P, Guo J, Fonseca V, Shi L, and Zhang P. "Socioeconomic Factors Play a More Important Role than Clinical Needs in the Use of SGLT2 Inhibitors and GLP-1 Receptor Agonists in People With Type 2 Diabetes." *Diabetes Care* 45, no. 2 (January 17, 2022): e32–33. https://doi.org/10.2337/dc21-1800.

17. Tew M, Willis M, Asseburg C, Shao H,..Clarke P. "Exploring Structural Uncertainty and Impact of Health State Utility Values on Lifetime Outcomes in Diabetes Economic Simulation Models: Findings from the Ninth Mount Hood Diabetes Quality-of-Life Challenge." Medical Decision Making, December 15, 2021, 0272989X211065479. https://doi.org/10.1177/0272989X211065479.

18. Laxy M, Zhang P, **Shao H**. "Trends in Total and Out-of-Pocket Payments for Insulin Among Privately Insured U.S. Adults With Diabetes From 2005 to 2018." *Diabetes Care* 44, no. 10 (August 4, 2021): e180–82. https://doi.org/10.2337/dc20-2529.

19. Li P, Patel R,..,**Shao H**. "The Diminishing Cost-Effectiveness of the Newer Glucose-Lowering Drug Classes in the United States: 2010-2018." Current Medical Research and Opinion 0, no. ja (August 25, 2021): 1–1. https://doi.org/10.1080/03007995.2021.1971181.

20. Zhang Y, Bian J, Huo J, Yang S,Guo Y, **Shao H**. "Comparing the Downstream Costs and Healthcare Utilization Associated with the Use of Low-Dose Computed Tomography (LDCT) in Lung Cancer Screening in Patients with and without Alzheimer's Disease and Related Dementias (ADRD)." Current Medical Research and Opinion 37, no. 10 (October 3, 2021): 1731–37. https://doi.org/10.1080/03007995.2021.1953972.

21. Ahmed M, Li P,Meece E. L, Bian J, **Shao H**. . "A Varied Approach to Left Ventricular Assist Device Follow-up Improves Cost-Effectiveness." Current Medical Research and Opinion 0, no. ja (June 28, 2021): 1–1. https://doi.org/10.1080/03007995.2021.1948395.

22. DeRemer C, Vouri S,..,**Shao H**. "Comparing Cardiovascular Benefits between GLP-1 Receptor Agonists and SGLT2 Inhibitors as an Add-on to Metformin among Patients with Type 2 Diabetes: A Retrospective Cohort Study." Journal of Diabetes and Its Complications, June 11, 2021, 107972. https://doi.org/10.1016/j.jdiacomp.2021.107972.

23. **Shao H**, Michael L, Stephen R.B., Yiling J.C, Edward W. G., and Ping Z. "Trends in Total and Out-of-Pocket Payments for Noninsulin Glucose-Lowering Drugs Among U.S. Adults With Large-Employer Private Health Insurance From 2005 to 2018." *Diabetes Care* 44, no. 4 (April 2021): 925–34. https://doi.org/10.2337/dc20-2871.

24. Guo Y, Christopher W, Shao H, et al. "Statin Use for Atherosclerotic Cardiovascular Disease Prevention Among Sexual Minority Adults." *Journal of the American Heart Association* 9, no. 24 (December 15,

2020): e018233. https://doi.org/10.1161/JAHA.120.018233.

25. Neuwahl S, Zhang P, Shao H, et al. "Patient Health Utility Equations for a Type 2 Diabetes Model." *Diabetes Care*, December 3, 2020. https://doi.org/10.2337/dc20-1207.

26. Gu S, Shi L, Shao H, et al. "Choice across 10 Pharmacologic Combination Strategies for Type 2 Diabetes: A Cost-Effectiveness Analysis." *BMC Medicine* 18, no. 1 (December 3, 2020): 378.

27. **Shao H**, Laxy M, Gregg E, et al. "Cost-Effectiveness of the New 2018 American College of Physicians Glycemic Control Guidance Statements Among US Adults With Type 2 Diabetes." **Value in Health**, November 6, 2020. https://doi.org/10.1016/j.jval.2020.09.010.

28. Chan J, Lee-Ling L, Nicholas W, et al. "The Lancet Commission on Diabetes: Using Data to Transform Diabetes Care and Patient Lives." **Lancet** (London, England), 2020, S0140–6736.

29. **Shao H,** Fonseca V, Shi L, et al. Cardiovascular and Metabolic Risk - Impact of Quality Improvement (QI) Program on 5-year Risk of Diabetes-related Complications. *Diabetes Care*, 43, no. 11 (November 1, 2020): 2847–52. https://doi.org/10.2337/dc20-0465.

30. Si L, Willis M, Shao H, et al. "Evaluating the Ability of Economic Models of Diabetes to Simulate New Cardiovascular Outcomes Trials: A Report on the Ninth Mount Hood Diabetes Challenge." **Value in Health**, August 6, 2020. https://doi.org/10.1016/j.jval.2020.04.1832.

31. Zhou X, Shrestha S, Shao H, and Zhang P. "Factors Contributing to the Rising National Cost of Glucose-Lowering Medicines for Diabetes During 2005–2007 and 2015–2017." **Diabetes Care**, July 31, 2020. https://doi.org/10.2337/dc19-2273.

32. Joshua D. B, Lo-Ciganic W, Shao H, Pahor M, and Manini T. Trajectories of Short Physical Performance Battery Are Strongly Associated with Future Major Mobility Disability: Results from the LIFE Study. Journal of Clinical Medicine 2020:9(8): 2332.

33. Laxy M, Zhang P, Ng B, Shao H, Ali M, Albright A, and Gregg E. Implementing Lifestyle Change Interventions to Prevent Type 2 Diabetes in US Medicaid Programs: Cost Effectiveness, and Cost, Health, and Health Equity Impact. Applied Health Economics and Health Policy. 2020 Epub ahead.

34. **Shao H**, Shi L, Fonseca V. Using the BRAVO Risk Engine to Predict Cardiovascular Outcomes in Clinical Trials With Sodium–Glucose Transporter 2 Inhibitors. *Diabetes Care* 43, no. 7 (July 1, 2020): 1530–36. https://doi.org/10.2337/dc20-0227.

35. Yoshida Yi, Cheng X, Shao H, Fonseca V, and Shi L. A Systematic Review of Cost-Effectiveness of Sodium-Glucose Cotransporter Inhibitors for Type 2 Diabetes. Current Diabetes Reports. 2020:12

36. Hong D, Shen Y, Monnette A, Liu S, Shao H, Nauman E, Shi L. Does the Encounter Type Matter When Defining Diabetes Complications in Electronic Health Records? Medical Care, 2020; 58(1):53-59.

37. Qin W, Xu L, Sun L, Jiajia Li, and **Shao H**. Association between Frailty and Life Satisfaction among Older People in Shandong, China: The Differences in Age and General Self-Efficacy. Psychogeriatrics, 2020;20(2):172-179.

38. Kristi A, Shao H, Shi L. Policy Options for Addressing the High Cost of Specialty Pharmaceuticals. Global Health Journal, 2019;3(4):79-83.

39. Kristin M, Zhuo X, Bardenheier B, Shao H, Laxy M, Schulze M. Selecting the Optimal Risk Threshold of Diabetes Risk Scores to Identify High-Risk Individuals for Diabetes Prevention: A Cost-Effectiveness Analysis. Acta Diabetologica,2020;57:440-454.

40. **Shao H**, Lin J,Zhuo X,Rolka D,Greg E, Zhang P. Influence of Diabetes Complications on HbA1c Treatment Goals among Older US Adults: A Cost-Effectiveness Analysis. *Diabetes Care*, 2019; 42(11): 2136-2142.

41. **Shao H**,Yang S, Fonseca V,Stoecker C, Shi L.(2019) Addressing regional differences in diabetes progression: global calibration for diabetes simulation model. **Value in Health**, 2019;22(12):1402-1409.

42. Shao, Y, Shao, H, Shi, L. Serum uric acid as a risk factor of all-cause mortality and cardiovascular events among type 2 diabetes population: Meta-analysis of correlational evidence. Journal of Diabetes and its Complications, 2019;21

43. Qin, W, Xu,L,.,**Shao,H.** An Exploratory Spatial Analysis of Overweight and Obesity among Children and Adolescents in Shandong, China. BMJ Open. 2019 epub.

44. Hong, D, Shao, H, Shi, L. Cost Effectiveness of Sodium-Glucose Cotransporter-2 (SGLT2) Inhibitors, Glucagon-Like Peptide 1 (GLP-1) Receptor Agonists, Dipeptidyl Peptidase 4 (DPP-4) inhibitors: A Systematic Review. Pharmacoeconomics, 2019;37:777-818.

45. **Shao, H**,Yang, S, Fonseca V, Stoecker C, Shi L. Estimating Quality of Life Decrements Due to Diabetes Complications in the United States: The Health Utility Index (HUI) Diabetes Complication Equation. Pharmacoeconomics, 2019;37:921-929.

46. Mir, M.U., Akhtar F, Shao H. A Meta-analysis of the Association Between Needle Exchange Programs and HIV Seroconversion Among Injection Drug Users. Cureus, 2018. 10(9).

47. Qin W, Xu L,Li J, Sun L, Shao H, Xu N. Estimating Benefit Equity of Government Health Subsidy in Healthcare Services in Shandong Province, China: A Cross-sectional Study. International Journal for Equity in Health 17 (1): 61

48. **Shao, H**, Fonseca V, Stoecker C, Shi L. Novel Risk Engine for Diabetes Progression and Mortality in USA: Building, Relating, Assessing, and Validating Outcomes (BRAVO). Pharmacoeconomics,2018;36: 1125-1134.

49. Shi Q, Shao H, Shi L . Long-term Outcomes Associated with Triple-Goal Achievement in Veterans with Type 2 Diabetes Mellitus (T2DM). American Journal of Managed Care, 2019;140:45-54.

50. **Shao H**, Charles S, Shuang Y, Shi L. The Pitfall of Instrumental Variables in Big Data: What the Rule of Thumb Can't Give You. Communications in Statistics - Simulation and Computation, 2019;48(7):2118-2124.

51. **Shao H**, Charles S, Shi L. Cost Sharing and Demand Elasticity on Disease Modifying Therapies (DMTs) in Multiple Sclerosis. **Value in Health**. 2018;21(9):1083-1089.

52. Monnette A, Zhang Y, Shao H. Concordance of Adherence Measurement Using Self-ReportedAdherence Questionnaires and Medication Monitoring Devices:An Updated Review. PharmacoEconomics, 2018;36:17-27.

53. Zawadzk N, Shao H, Shi L. Readmission Due To Infection Following Total Hip And Total Knee Procedures: A Retrospective Study. Medicine. 96(38): e7961

54. Shi Q, Shao H, Shi L. EVALUATION OF THE QUALITY BLUE PRIMARY CARE PROGRAM ON HEALTH OUTCOMES. AJMC. 2017:23(12):e402-e408.

55. Shi JZ, Shao H, Shi L. Direct Health Care Costs Associated with Obesity in Chinese Population in 2011. *Journal of Diabetes and Its Complications.*2017;31(3):523-528.

56. **Shao H**, Zou D, Zhai S, Mohammed MU , Zawadzki NK, Shi Q, Liu S, Shi L. COST-EFFECTIVENESS ANALYSIS OF DAPAGLIFLOZIN VERSUS GLIMEPIRIDE AS MONOTHERAPY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS IN CHINA. *Current Medical Research & Opinion*,2017;33(2):359-369.

57. **Shao H,** Brown L, Diana M, Schmidt L, Mason K, Oronce CI, Shi L, Estimating the Costs of Supporting Safety-Net Transformation into Patient-Centered Medical Homes (PCMH) in Post-Katrina New Orleans. *Medicine*. 2016, 95(39): e4990.

58. **Shao H**, Mohammed MU, Thomas N, Babazadeh S, Yang S, Shi Q, Shi L. Evaluating Excessive Burden of Depression on Health Status and Health Care Utilization among Patients with Hypertension in a Nationally Representative Sample from the Medical Expenditure Panel Survey (MEPS 2012). The *Journal of Nervous and Mental Disease*. 2017:205(5):397-404.

59. Wu J, Li X, Song Y, Shao H, Shi Q, Qin D, et al. The impact of a bundled policy intervention on improving the performance of rural healthcare in China. *International Journal for Equity in Health*. 2016;15(1):1.

60. **Shao H**, Li S, Xu L, Yang S, Thomas NJ, Mir MU, et al. Mapping and Analyzing Stakeholders in China's Essential Drug System by Using a Circular Model: Who We Should Deal with Next? *Value in Health Regional Issues*. 2015;6:111-7.

61. Oronce CIA, Shao H, Shi L. Disparities in 30-Day Readmissions After Total Hip Arthroplasty. *Medical care*. 2015;53(11):924-30.

62. Velde N, Moparty K, Shi L, Sha H. Does an Inverse Correlation Exist between Vitamin D as Measured by 25-hydroxyvitamin D and PSA in Veterans with Prostate Cancer. *Med Surg Urol*. 2015;4(152):2.

63. Shi L, Liang F, Shao H, Hu X, Gu Q, Liu W, et al. Preliminary development of a reference conceptual framework about social responsibility of public hospitals in China. *Journal of Hospital Administration*. 2015;4(2):p23.

64. Katalenich B, Shi L, Liu S, Shao H, McDuffie R, Carpio G, et al. Evaluation of a remote monitoring system for diabetes control. *Clinical therapeutics*. 2015;37(6):1216-25.

65. Deng J, Gu S, Shao H, Dong H, Zou D, Shi L. Cost-effectiveness analysis of exenatide twice daily (BID) vs insulin glargine once daily (QD) as add-on therapy in Chinese patients with Type 2 diabetes mellitus inadequately controlled by oral therapies. *Journal of medical economics*. 2015;18(11):974-89.

66. Shi L, Shao H, Zhao Y, Thomas NA. Is hypoglycemia fear independently associated with health-related quality of life? *Health and quality of life outcomes*. 2014;12(1):1.

67. **Shao H**, S L, Lingzhong Xu, Shuang Yang. Analyzing the Factors in Influence Grassroots Doctors' willingness of using Essential Drugs in Shandong Province. *China Healthcare Administration*. 2012:904-6.

68. **Shao H**, S L, Lingzhong Xu, Bo Ning, Shuang Yang. Impact of Essential Drug Policy on Medicine Purchasing Propensity in Urban Residents. *Medicine&Philosophy*. 2012;33(6):46-8.

69. Shuang Yang LX, Xingzhou Wang, <u>Shao H</u>,Qingyun Xue, Zhen Guo, Weining Zhao, Qian Zhang, Rongfei Xu. Analysis on satisfactory degree of essential drug policies among outpatients. *Journal of Shandong University*. 2012;50(9):124.
70. Shuang Yang LX, Xingzhou Wang, <u>Shao H</u>. Analyzing the Awareness and Affecting Factors of Essential Medicines among Rural Residents in Shandong Province. *Medicine&philosophy*. 2012;33(2):53-4.
71. **<u>Shao H</u>**, S L, Lingzhong Xu, Shuang Yang. The Study on Tobacco Addiction and Its Correlation Factors in Rural Dongying. *Medicine&Philosophy*. 2011;32(10):37-9.
72. Bo Ning SL, Shao H. Analyzing the Factors in Influence Grassroots Doctors' willingness of using Essential Drugs in Shandong Province. *China Economics*. 2012;31(1):29.
73. Shuang Yang LX, Xingzhou Wang, Shao H,Qingyun Xue, Zhen Guo, Weining Zhao, Qian Zhang, Rongfei Xu. Corss-sectional study on implementation of essential drug system in community health services centers in Shandong Province. *China Healthcare Administration*. 2011:891-2.

Letters to the Editors

1. Guo S, and **<u>Shao H.</u>** "Growing Global Burden of Type 1 Diabetes Needs Multitiered Precision Public Health Interventions." **The Lancet Diabetes & Endocrinology** 10, no. 10 (October 1, 2022): 688–89. https://doi.org/10.1016/S2213-8587(22)00257-1.
2. **<u>Shao H.</u>** Shi L, Fonseca V. Comment on Segar et al. Machine Learning to Predict the Risk of Incident Heart Failure Hospitalization Among Patients With Diabetes: The WATCH-DM Risk Score. *Diabetes Care* 2019;42:2298–2306

Conference Symposium Presentations:

1. **<u>Shao H.</u>** SGLT2is and GLP-1RAs—Are They Worth It?
The American Diabetes Association 81th Conference. June 24-28.

Conference Podium Presentations:

1. Yu Wang, Hui Shao, Giuseppina Imperatore, Christopher Holliday, Ping Zhang. Income-related disparities in medical expenditures in U.S. adults with diabetes. The American Diabetes Association 82th Conference. June 3-8.
2. Yao Ding, Lizheng Shi, Hui Shao. Trends in Total Payments, Net Payments, and Rebates for a 30-Day Supply of Glucose-Lowering Drugs (GLDs) from 2010–2017. The American Diabetes Association 82th Conference. June 3-8.
3. Wenxi Huang, Dawei Guan, Shu Niu, Mohammed K Ali, Yongkang Zhang, Jingchuan Guo, Hui Shao. Increasing Economic Returns of Structured Lifestyle Intervention Associated with Rising Costs of Treating Diabetes: 2010–2018. The American Diabetes Association 82th Conference. June 3-8.
4. Yehua Wang, Ping Zhang, Ruogu Fang, Joshua Brown, Jingchuan Guo, Tianze Jiao, Hui Shao. Associations between Post-discharge Care (PDC) and Cognitive Impairment–Related Hospital Readmissions for Ketoacidosis and Severe Hypoglycemia in Adults with Diabetes. The American Diabetes Association 82th Conference. June 3-8.
5. Hamed Kianmehr, Yilu Lin, Lizheng Shi, Vivian Fonseca, Jingchuan Guo, Hui Shao. Identify Effect Modulators of Intensive Glucose Control in Preventing Cognitive Function Decline among Individuals with Type 2 Diabetes: A Revisit to the ACCORD MIND Trial. The American Diabetes Association 82th Conference. June 3-8.
6. Shu Niu, Lizheng Shi, Vivian Fonseca, Hui Shao. Five-Year Simulation of Diabetes-Related Complications in Individuals Treated with Once-Weekly Tirzepatide and Semaglutide vs. Once-Daily Insulin Glargine. The American Diabetes Association 82th Conference. June 3-8.
7. Kianmehr H,..,Shao H. ADA Presidents' Select Abstract Presentation: Potential Gains in Life Expectancy (LE) Associated with Achieving Treatment Goals in People with Type 2 Diabetes (T2D) in the U.S. The American Diabetes Association 81th Conference. June 24-28.
8. Shao H,..,Brown J. Projected Impact of the Medicare Part D Senior Savings Model (SSM) on Diabetes-Related Health and Economic Outcomes among Insulin Users Covered by Medicare. The American Diabetes Association 81th Conference. June 24-28.
9. Park J, Shao H,..,Imperatore P. Selecting Intervention Population for Lifestyle Program for Type 2 Diabetes Prevention (LPT2DP): A Cost-Effectiveness Perspective. The American Diabetes Association 81th Conference. June 24-28.
10. Hoerger T, Shao H,..,Zhang P. A New Type 2 Diabetes Microsimulation Model to Estimate Long-Term

Health Outcomes, Costs, and Cost-Effectiveness. The American Diabetes Association 81th Conference. June 24-28.

11. DeRemer C,.., Shao H. Comparing Cardiovascular Benefits between GLP-1RA and SGLT2i as an Add-On to Metformin among U.S. Adults with Type 2 Diabetes (T2D). The American Diabetes Association 81th Conference. June 24-28.

12. Kianmehr H,..,Shao H. A Machine Learning Approach Identifies Modulators of Congestive Heart Failure Hospitalization Prevention among Patients with Type 2 Diabetes: A Revisit to the ACCORD Trial. The American Diabetes Association 81th Conference. June 24-28.

13. Li P,..,Shao. Trends in Racial and Ethnic Difference in Glucose-Lowering Medication (GLM) Use, Out of Pocket (OOP) Payment, and HbA1c Control in U.S. Adults with Diabetes, 2005-2018. The American Diabetes Association 81th Conference. June 24-28.

14. Huang S, Lo-Ciganic WH, Shao H. Cost-Effectiveness of Intensive VS. Moderate Hypertension Treatment in US Adults Age 65 and Older at High Risk of Atherosclerotic Cardiovascular Disease. The Virtual ISPOR 2021 Conference. May 17-20 in Montreal.

15. Shao H, Yang S, Fonseca V, Shi L. Intensive Glycemic Control Can Reduce Major Adverse Cardiovascular Events (MACE): A Bayesian's Narrative. The 80th annual conference of American Diabetes Association. June 12-14, 2020.

16. Shao H, Greg E, Zhang P. Trends in Total and Out-of-Pocket Payment on a Yearly Insulin Supply among Private Health Insured U.S. Adults with Diabetes from 2003 to 2016. The 79th annual conference of American Diabetes Association. June 6-12, 2019 in San Francisco.

17. Shao H, Greg E, Zhang P. Cost Effectiveness of the New 2018 ACP Glycemic Control Guideline among U.S. Adults with Type 2 Diabetes. The 79th annual conference of American Diabetes Association. June 6-12 , 2019 in San Francisco.

18. Zhou XL, Shao H, Greg E, Zhang P. What Has Contributed to the Increase in the National Spending on Antidiabetic Drugs: 2005-2016?The 79th annual conference of American Diabetes Association. June 6-12, 2019 in San Francisco.

19. Shao H, Zhang P. Simulation Results of CDC-RTI model and its implication on Treatment Superiority. The 9th Mount Hood Challenge Meeting, OCT 4-8, 2018 in Düsseldorf, German.

20. Shi L, Shao H, Yang S, Fonseca V. Estimating Quality of Life Decrements Due to Diabetes Complications in the United States. The 9th Mount Hood Challenge Meeting, OCT 4-8, 2018 in Düsseldorf, German.

21. Shao H, Lin J, Zhuo X, Laxy M, Gregg E, Zhang P. Influence of Diabetes Complications on the Cost-effectiveness of HbA1c Treatment Goals in Older US Adults. CDC Annual Science Day. The 78th annual conference of American Diabetes Association. June 22-26 in Orlando.

22. Laxy M, Gregg E, Shao H, Zhang P. Cost-effectiveness of structured lifestyle programs for diabetes prevention in the Medicaid population. The 78th annual conference of American Diabetes Association. June 22-26 in Orlando.

23. Shao H, S, Laxy M, Gregg E, Zhang P. New 2017 ACCAHA hypertension guidelines cost-effectiveness among US adults with type 2 diabetes. The 78th annual conference of American Diabetes Association. June 22-26 in Orlando.

24. Shao H, Shrestha S, Laxy M, Gregg E, Zhang P. Program Selections for Type 2 Diabetes Prevention: a Cost-effectiveness Analysis. CDC Annual Science Day. June 2018 in Atlanta.

25. Shao H, Shrestha S, Laxy M, Gregg E, Zhang P. Trend in Out-of-pocket Payments for Antidiabetic Medications among US Adults with Private Health Insurance from 2003 to 2016: A Combined Recursive Partition Interrupted Time Series Analysis, CDC Annual Science Day. June 2018 in Atlanta.

26. Shao H, Lin J, Zhuo X, Laxy M, Gregg E, Zhang P. Influence of Diabetes Complications on the Cost-effectiveness of HbA1c Treatment Goals in Older US Adults. CDC Annual Science Day. June 2018 in Atlanta.

27. Shao H, Laxy M, Gregg E, Zhang P. New 2017 ACCAHA hypertension guidelines cost-effectiveness among US adults with type 2 diabetes Final. CDC Annual Science Day. June 2018 in Atlanta.

28. Shao H, Shi L, Globalization Module for a Diabetes Progression Prediction Model: the BRAVO model. *ISPOR 23st Annual International Meeting*, May 19-23, 2018 in Baltimore, USA.

29. Shao H, Fonseca V, Stoecker C, Shi L. UPDATING RISK ENGINE FOR DIABETES PROGRESSION AND MORTALITY IN THE UNITED STATES: the Building, Relating, Acting, Validating for Outcomes (BRAVO) of Diabetes Risk Engine. Annual Meeting of Internation Health Economics Association, July 7-11, 2017 in Boston, US.

30. Shao H, Stoecker C, Shi L. When Doubly Robust Is Not Robust Enough: Nonparametric Matching Methods Under Treatment Heterogeneity. Academy Health Annual Research Meeting, June, 2017 in New Orleans.

31. Shao H, Shi L, Diana M, Brown L, Mason K, Cocran D, Carruth A,SchmidtL, Estimating the Costs of Supporting Safety-Net Transformation into Patient-Centered Medical Homes (PCMH) in Post-Katrina New Orleans. *ISPOR 21st Annual International Meeting*, May 21-25, 2016 in DC, USA

32. Shao H, Shi L. Size Distortion of Hypothesis Test for Two-Stage Least Squares Model: What the Gold Standard Can't Give You. *The CES 2015 North America Conference*, March 13-14, 2015 in Ann Arbor, Michigan, USA

Poster Presentations:

1. Y Wang, Yushi Huang, Vakaramoko Diaby, Hui Shao. Cost-Effectiveness of Lisinopril and Carvedilol for Prevention of Trastuzumab-Induced Cardiotoxicity in US Adults with Early-Stage Breast Cancer. The ISPOR 2022 Conference. May 14-17 in DC.

2. S Abuloha, Piaopiao Li, J Bian, Y Guo, Hui Shao. CAPOX versus mFOLFOX as Adjuvant Chemotherapy in Patients with Stage 3 Colon Cancer: A Cost-Effectiveness Study. The ISPOR 2022 Conference. May 14-17 in DC.

3. R Aroza, A Ndai, Khalid Alkhuzam, Hui Shao, Tianze Jiao. Cost-Effectiveness Analysis of Hemodialysis Vs. Peritoneal Dialysis Among Patients with End-Stage Renal Disease. The ISPOR 2022 Conference. May 14-17 in DC.

4. A Alshehri, K Alkhuzam. S Niu. T Jiao. Y Zhang. H Shao. Cost-Effectiveness Analysis of Empagliflozin Versus Albiglutide Among Individuals with Type 2 Diabetes in the US. The ISPOR 2022 Conference. May 14-17 in DC.

5. K Alkhuzam. D Guan. R Aroza. S Abuloha. H Shao. The Cost-Effectiveness of Olaparib Compared to Niraparib in the Treatment of Recurrent Ovarian Cancer Caused By BRCA1 and BRCA2 Gene Mutation from a US Healthcare Payer Perspective. The ISPOR 2022 Conference. May 14-17 in DC.

6. T Tang, V Fonseca, H Shao, L Shi. A Novel Risk Engine for Diabetes-Related Complications Among Individuals with Type 1 Diabetes in the US. The ISPOR 2022 Conference. May 14-17 in DC.

7. A Ndai, Y Guo, T Jiao, R Aroza, H Park, H Shao, SM Vouri. Cost-Effectiveness of Tenofovir/Lamivudine/Efavirenz Versus Tenofovir/Lamivudine/Dolutegravir for Preventing Mother-to-Child Transmission of HIV in Nigeria. The ISPOR 2022 Conference. May 14-17 in DC.

8. Khalid A. Alkhuzam, Lizheng Shi, Vivian Fonseca, Yongkang Zhang, Jingchuan Guo, Hui Shao. Long-Term Health Benefit and Economic Return of Time in Range (TIR) Improvement in Individuals with Type 2 Diabetes. The American Diabetes Association 82th Conference. June 3-8.

9. Piaopiao Li, Eliot Spector, Khalid Alkhuzam, Rahul Patel, William T Donahoo, Sarah Bost, Tianchen Lyu, Yonghui Wu, William Hogan, Mattia Prosperi, Brian E Dixon, Dana Dabelea, Levon H Utidjian, Tessa L Crume, Lorna Thorpe, Angela D. Liese, Desmond A Schatz, Mark A Atkinson, Michael J. Haller, Elizabeth A Shenkman, Jiang Bian, Yi Guo, Hui Shao. Developing a Computable Phenotype Algorithm for Identification of Children and Adolescents with Diabetes Using Electronic Health Records. The American Diabetes Association 82th Conference. June 3-8.

10. Piaopiao Li, Tianchen Lyu, Jingchuan Guo, Yi Guo, Jiang Bian, Hui Shao. The Role of Health System Penetration Rate in Estimating Prevalence of Type 1 Diabetes (T1D) in Children and Adolescents Using Electronic Health Records (EHR). The American Diabetes Association 82th Conference. June 3-8.

11. Yahan Zhang, Ping Zhang, Meda Pavkov, Yu Wang, Jingchuan Guo, Yongkang Zhang, Hui Shao. Association between Social Determinants of Health and Risk of Type 2 Diabetes in Young Adults Aged 18–45. The American Diabetes Association 82th Conference. June 3-8.

12. Sumaya Abuloha, Alaa A. Alshehri, Michael Jaffee, Naykky Singh Ospina, Hui Shao. A Scoping Review on Diabetes Management in People with Mild Cognitive Impairment (MCI): Glycemic Control, Medications, and Onset of Alzheimer's and Related Dementias (ADRD). The American Diabetes Association 82th Conference. June 3-8.

13. Sarah Conderino, Rebecca Anthopolos, Lorna E. Thorpe, Bo Cai, Hui Shao, Tessa Crume, Toan Ong, Les Kirchner, Brian Schwartz, Marc Rosenman, Victor Zhong, Kristi Reynolds, Levon Utidjian, Seho Park, Jasmin Divers. The Evaluating Alternate Bias Correction Methods in Estimating Diabetes Prevalence with Electronic Health Records. The American Diabetes Association 82th Conference. June 3-8.

14. Hamed Kianmehr, Yilu Lin, Lizheng Shi, Vivian Fonseca, Jingchuan Guo, Hui Shao. Modulators of Treatment Benefits of Albiglutide (GLP-1 RA) in Preventing Major Adverse Cardiovascular Events

(MACE) among Individuals with Type 2 Diabetes in the HARMONY Trial Using Machine Learning. The American Diabetes Association 82th Conference. June 3-8.

15. Shu Niu, Dawei Guan, Naykky Singh Ospina, Keneth Cusi, Vivian Fonseca, Lizheng Shi, Hui Shao. Reductions in Traditional Risk Factors Explain Most of the Cardiovascular Benefit of SGLT2 Inhibitors and GLP-1 Receptor Agonists: An Analysis Using the BRAVO Risk Engine. The American Diabetes Association 82th Conference. June 3-8.

16. Dawei Guan, Jingchuan Guo, Ji-Hyun Lee, XiangYang Lou, Hui Shao. Generating Intercorrelated Data for Simulation Samples in Diabetes Microsimulation Experiment. The American Diabetes Association 82th Conference. June 3-8.

17. Dawei Guan, Ping Zhang, Shichao Tang, Joshua Brown, Ruogu Fang, Jingchuan Guo, Yongkang Zhang, Hui Shao. Incremental Health Care Utilizations and Medical Expenditures Associated with Cognitive Impairment among Older Adults with Diabetes. The American Diabetes Association 82th Conference. June 3-8.

18. Yixue Shao, Lizheng Shi, Vivian Fonseca, Hui Shao. External Validation of the BRAVO Diabetes Model Using Data from the EXSCEL Study. The American Diabetes Association 82th Conference. June 3-8.

19. Piaopiao Li, Ping Zhang, Shichao Tang, Jingchuan Guo, Joshua Brown, Tianze Jiao, Hui Shao. Racial and Ethnic Disparities in Diabetes Management, Hospitalization Risk, and Physical Health Status Associated with Cognitive Impairment among Older Adults with Diabetes. The American Diabetes Association 82th Conference. June 3-8.

20. Hui Shao, Khalid Alkhuzam, Tianze Jiao, Ping Zhang, Edward W Gregg. Racial/Ethnic Differences in the Use of Blood Pressure–Lowering Drugs Associated with Different Risk levels of Type 2 Diabetes among U.S. Adults without Diabetes. The American Diabetes Association 82th Conference. June 3-8.

21. Dawei Guan, Shu Niu, Vivian Fonseca, Lizheng Shi, Mohammed Ali, Neda Laiteerapong, Jingchuan Guo, Hui Shao. Individualized Cost-Effectiveness Assessment of Sodium–Glucose Cotransporter 2 Inhibitors (SGLT2i) vs. Sulfonylureas as Add-On Therapy in People with Inadequately Controlled Type 2 Diabetes (T2D) Under Metformin Monotherapy. The American Diabetes Association 82th Conference. June 3-8.

22. Yilu Lin, Hui Shao, Vecihi Batuman, Amanda H Anderson, Vivian Fonseca, Lizheng Shi. A Prediction Model on Incident CKD among Individuals with T2D in the United States. The American Diabetes Association 82th Conference. June 3-8.

23. Yilu Lin, Hui Shao, Vecihi Batuman, Amanda H Anderson, Vivian Fonseca, Lizheng Shi. A Prediction Model of Chronic Kidney Disease Progression among Individuals with Type 2 Diabetes in the United States. The American Diabetes Association 82th Conference. June 3-8.

24. Yilu Lin, Hui Shao, Vecihi Batuman, Amanda H Anderson, Vivian Fonseca, Lizheng Shi. A Prediction Model on Incident End-Stage Kidney Disease (ESKD) among Individuals with Type 2 Diabetes (T2D) and Chronic Kidney Disease (CKD). The American Diabetes Association 82th Conference. June 3-8.

25. Hamed Kianmehr, Ping Zhang, Naykky Singh Ospina, Lizheng Shi, Vivian Fonseca, Jingchuan Guo, Hui Shao. Certain Patient Subgroups with Type 2 Diabetes May Benefit from Intensive Glycemic and Blood Pressure Control from Reductions in Major Adverse Cardiovascular Events (MACE): A Machine Learning–Based Post Hoc Analysis of ACCORD Trial Data. The American Diabetes Association 82th Conference. June 3-8.

26. Lin Y, Shao H,.., Shi L. A Risk Score to Predict Incident Heart Failure among Patients with Type 2 Diabetes Mellitus. The American Diabetes Association 81th Conference. June 24-28.

27. Shao H,..,Shi L. Efficacy of IGlarLixi on Five-Year Risk of Diabetes-Related Complications: A Simulation Experiment. The American Diabetes Association 81th Conference. June 24-28.

28. Li P,..,Shao H. The Diminishing Cost-Effectiveness of the Newer Glucose-Lowering Drugs in the United States, 2010-2018. The American Diabetes Association 81th Conference. June 24-28.

29. Wang Y, Shao H,..,Imperatore G. Cost of Diabetes Complications in U.S. Adults Aged 65 Years or Older. The American Diabetes Association 81th Conference. June 24-28.

30. Wang Y, Huang Y, Shao H, Winterstein A. Cost-effectiveness of pembrolizumab versus chemotherapy for advanced esophageal squamous cell carcinoma (ESCC) as the second-line treatment among Chinese population. The Virtual ISPOR 2021 Conference. May 17-20 in Montreal.

31. Zhang Y, Bian J,..,Shao H. Comparing the Downstream Costs and Healthcare Utilization Associated with the Use of Low-dose Computed Tomography (LDCT) in Lung Cancer Screening in Patients with and without Alzheimer's Disease and Related Dementias (ADRD). The Virtual ISPOR 2021 Conference. May 17-20 in Montreal.

32. Zhang P, Shao H, Chen H. Cost of Achieving A1C Treatment Goals in Patients with Type 2 Diabetes: Results from the Action to Control Cardiovascular Risk in Diabetes (ACCORD) Trial. The 80th annual

conference of American Diabetes Association. June 12-14, 2020.

33. Neuwahl S, Hoerger T, Shao H, Zhang P. Preventing Diabetes: Resource Allocation between Risk-Based and Whole Population–Based Approaches. The 80th annual conference of American Diabetes Association. June 12-14, 2020.

34. Hoerger T, Kaufmann M, Shao H, Zhang P. Developing New Risk Equations to Predict Diabetes-Related Complications and Mortality in U.S. Adults with Type 2 Diabetes. The 80th annual conference of American Diabetes Association. June 12-14, 2020.

35. Yang W, Cintina I, Shao H, Zhang P.Estimating the Costs of Diabetes Complications in People. The 80th annual conference of American Diabetes Association. June 12-14, 2020.

36. Kianmehr H, Yang S, Shao H. Life Expectancy of Individuals with Type 2 Diabetes Mellitus (T2DM) in the United States. The 80th annual conference of American Diabetes Association. June 12-14, 2020.

37. Hong D, Shen Y, Shao H, Shi L. Does The Encounter Type Matter When Defining Diabetes Complications In Electronic Health Records? May 15-18, International Society of Pharmacoeconomics and Outcomes Research Annual meeting (2020, online).

38. Shao H,Shi L, Furman R, Fonseca V. Impact of Quality Improvement (QI) Program on 5-Year Risk of Diabetes-Related Complications. The 79th annual conference of American Diabetes Association. June 6-12, 2019 in San Francisco.

39. Shao H, Greg E, Zhang P. Trend in Total Payment and Out-of-Pocket Payment on a Yearly Supply of Oral Antidiabetic Drug Types among U.S. Adults with Private Health Insurance from 2003 to 2016. The 79th annual conference of American Diabetes Association. June 6-12 in San Francisco.

40. Shao H,Shi L, Fonseca V. Estimating Diabetes Duration from Electronic Medical Records (EMRs) with an Intrinsic Diabetes Risk Prediction Model: From Clinical Trial to Real-World Clinical Practice. The 79th annual conference of American Diabetes Association. June 6-12 in San Francisco.

41. Shao H, Fonseca V, Shi L. is higher-priced insulin associated with better economic and health outcomes? a study from a value-based payment perspective. ISPOR. May 18-22 in New Orleans.

42. Shao H, Fonseca V, Stoecker C, Shi L. Projecting Long-Term Diabetes Complications through a BRAVO-Based Mock Simulation for Promoting Diabetes Prevention Program (DPP. The 78th annual conference of American Diabetes Association. June 22-26 in Orlando.

43. Shao Y, Shao H, Shi L. Serum Uric Acid (SUA) as a Risk Factor of Cardiovascular Events in Diabetes Population: a Meta-analysis of Correlational Evidence. The 78th annual conference of American Diabetes Association. June 22-26 in Orlando.

44. Laxy M, Gregg E, Shao H, Zhang P. Health Benefits and Cost Impact of Paying for Diabetes Prevention Lifestyle Programs in Medicaid Beneficiaries. Academy Health Annual Research Meeting. June 22-26 2018 in Seattle.

45. Laxy M, Gregg E, Shao H, Zhang P. The impact of insurance status on quality of diabetes care in the United States. Academy Health Annual Research Meeting. June 22-26 2018 in Seattle

46. Shao H, Shrestha S, Laxy M, Gregg E, Zhang P. Program Selections for Type 2 Diabetes Prevention: a Cost-effectiveness Analysis. Academy Health Annual Research Meeting. June 22-26 2018 in Seattle.

47. Shao H, Shrestha S, Laxy M, Gregg E, Zhang P. Trend in Out-of-pocket Payments for Antidiabetic Medications among US Adults with Private Health Insurance from 2003 to 2016: A Combined Recursive Partition Interrupted Time Series Analysis, Academy Health Annual Research Meeting. June 22-26 2018 in Seattle.

48. Shao H, Yang S, Fonseca V,Shi L. Estimating Quality of Life Decrements Due to Diabetes Complications in the United States. ISPOR 23st Annual International Meeting, May 19-23, 2018 in Baltimore, US.

49. Shao H, Shi L. THE IMPACT OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) AND METHICILLIN-SENSITIVE STAPHYLOCOCCUS AUREUS (MSSA) INFECTION ON HOSPITAL READMISSIONS AMONG PATIENTS WITH PNEUMONIA. ISPOR 22st Annual International Meeting, May 21-25, 2017 in Boston, US.

50. Yin L, Shao H, Shi L.REGIONAL VARIATION OF INTRAVENOUS TISSUE PLASMINOGEN ACTIVATOR (IV TPA) UTILIZATION AMONG ISCHEMIC STROKE PATIENTS IN THE UNITED STATES (US). Academy Health Annual Research Meeting, June, 2017 in New Orleans.

51. Shao H, Fonseca V, Stoecker C, Shi L. UPDATING RISK ENGINE FOR DIABETES PROGRESSION AND MORTALITY IN THE UNITED STATES: INTERNAL VALIDATION. ISPOR 22st Annual International Meeting, May 21-25, 2017 in Boston, US.

52. Shao H, Stoecker C, Shi L. When Doubly Robust Is Not Robust Enough: Nonparametric Matching Methods Under Treatment Heterogeneity. ISPOR 22st Annual International Meeting, May 21-25, 2017 in Boston, US.

53. Shao H, Qian Shi, Shuqian Liu, Lizheng Shi. COST-EFFECTIVENESS ANALYSIS OF DAPAGLIFLOZIN VERSUS GLIMEPIRIDE AS MONOTHERAPY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS IN CHINA. The ISPOR 7th Asia-Pacific Conference. Sept 3-6, 2016 in Singapore.

54. Shuyan G, Shao H, Hengjin Dong. COST-EFFECTIVENESS OF SAXAGLIPTIN VERSUS ACARBOSE AS SECOND-LINE THERAPY IN TYPE 2 DIABETES IN CHINA. The ISPOR 7th Asia-Pacific Conference. Sept 3-6, 2016 in Singapore. Sept 3-6, 2016 in Singapore.

55. Velde N, Moparty K, Shi L, Sha H. Does an Inverse Correlation Exist Between Vitamin D as Measured by 25(OH) Choleciferol and PSA in Veterans with Prostate Cancer, Louisiana Cancer Research Consortium, April 22, 2016 in New Orleans, USA

56. Shao H, Shi L, Charles S. Cost Sharing and Demand Elasticity on Disease Modifying Therapies (DMTs) in Multiple Sclerosis. ISPOR 21st Annual International Meeting, May 21-25, 2016 in DC, USA

57. Shao H, Mir MU, Ye X, Thomas N, Babazadeh S. Impact of Depression on Health Status and Health Care Utilization in Patient with Hypertension. ISPOR 21st Annual International Meeting, May 21-25, 2016 in DC, USA

58. Michele S, Liu E, Wang Y, Shao H, Shi L. READMISSION DUE TO INFECTION FOLLOWING TOTAL HIP AND TOTAL KNEE PROCEDURES. ISPOR 21st Annual International Meeting, May 21-25, 2016 in DC, USA

59. Shao H, Shi L. Effect of health insurance benefit plan design on comparative effectiveness of anti-diabetic medications in adults with type 2 diabetes mellitus. American Society of Health Economics Fifth Biennial Conference, June, 2014 in Los Angeles.

60. Shao H, Shi L, Shi Q. Size distortion of hypothesis tests for two-stage least squares model: what the rule of thumb can't give you. ISPOR 19th Annual International Meeting, June, 2014 in Montreal, QC, Canada.

61. Oronce CI, Shao H, Shi L. Disparities in 30-day readmissions after total hip arthroplasty. Academy Health Annual Research Meeting, June, 2014 in San Diego.

62. Katalenich B, Shi L, Liu S, Shao H, McDuffie R, Haggar M, Wang A, Carpio G, Thethi, Fonseca V. Evaluation of a remote monitoring system for diabetes control and medication adherence. The 74th American Diabetes Association annual meeting. June, 2014 in San Francisco.

63. Price-Haywood EG, Amering S, Shao H, Shi L. Diabetes care management: comparative effectiveness of clinical decision support vs. additional pharmacist-led self-management support. American Public Health Association. Annual Conference. November 2014 in New Orleans.

64. Shao H, Shi L. Interventions for reducing 30-day hospital readmission: A systematic review. Academy Health Annual Research Meeting, June, 2013 in Baltimore.

65. Shao H, Shi L. Mapping and analyzing stakeholders in china's essential drug operation system by using circular model: who we should deal with next? ISPOR 18th Annual International Meeting, June, 2013 in New Orleans.

66. Shi L, Shao H, Is hypoglycemia fear independently associated with health-related quality of life?ISPOR 18th Annual International Meeting, June, 2013 in New Orleans.

67. Shao H, Shi L, Mapping and Analyzing Stakeholders in China's Essential Drug System by Using a Circular Model: Who We Should Deal with Next? Tulane Health Research Science Day, Feb 1-2, 2013 in New Orleans, USA

Service to the Profession
Reviewer
The Lancet
The Lancet Diabetes and Endocrinology
Annals of Internal Medicine
Diabetes Care
Value in Health
Journal of Diabetes and Its Complications

Professional Associations
Current
Director of Academics, China Health Policy and Management Society
Member of the External Advisory Board for the Institute for Clinical and Economic Review (ICER)

Member of Editorial board for the Journal of Diabetes and its Complications
Member of Editorial board for the Global Health Journal

Members, *International Society for Pharmacoepidemiology (ISPE)*
Members, *International Society for Pharmacoeconomics and Outcomes Research (ISPOR)*
Members, *American Society of Health Economics (ASHEcon)*
Members, *Chinese Economists Society (CES)*
Members, *American Diabetes Association (ADA)*
Members, *Academy Health*
Members, *International Health Economics Association (iHEA)*

Past
President *of Tulane Student Chapter for International Society for Pharmacoeconomics and Outcomes Research (ISPOR)* *June 2013 – May 2017*
Member of Grant Objective Review Committee *for the Division of Population Health, CDC*
Feb 2018
Member of Grant Objective Review Committee *for the Division of Diabetes Translation, CDC*
Feb 2018
Member of Health Economics Research Group (HERG) award committee, *CDC*
OCT 2017

MEDIA COVERAGE

Reported by Endocrinology: "Estimating the Impact of the Medicare Part D Senior Savings Model on Expenses for Insulin Users on Medicare."
Reported by *Redcliff Cardiology: Intensive Glycemic Control Can Reduce Major Adverse Cardiovascular Events (MACE): A Bayesian's Narrative.*
Reported by *MedicalResearch*: Insulin Costs Rise But Mostly Not Paid For Out-of-Pocket by Patients.
Reported by *Medscape*: Implementing ACP Diabetes Guidelines Could Be Cost-Effective.
Reported by *MD Magzine*: ACP Guideline for A1c Levels Provide Cost-Effectiveness for Diabetics.
Reported by *Endocrinology Advisor*: Triple-Goal Achievement Reduces Risk for Complications in Type 2 Diabetes.
Reported in *Tulane News (2018)*: Tulane researchers develop new way to predict complications in diabetes patients.
Reported in *Tulane News (2016)* on presentation: The Costs of Supporting Safety-Net Transformation into Patient-Centered Medical Homes (PCMH) in Post-Katrina New Orleans
Reported in *ISPOR News (2015)* on paper: Ensuring the Future for China's Essential Drug Policy.
Reported in *Tulane News (2015)* on research: Disparities in 30-Day Readmissions after Total Hip Arthroplasty.

GUEST LECTURES:

- *"Economic Evaluation: A New Tool For Clinical Outcomes Research"*
  The Cardiology Grand Round, UF Shands Hospital, 2022 Spring
- *"Use Simulation Experiment to Guide National Policy"*
  Shandong University, China, 2020
- *"New Advancements in Computer Simulation"*
  University of South California, The Leonard D. Schaeffer Center, 2019, fall
- *"Application of Computer Simulation in Modern Clinical Practice."*
  Provincial Diabetes Hospital, Shandong, China, 2018 Summer
- *"Intensive Glycemic Control is Less Cost Effective on older people with more comorbidities/ complications."*
  Division of Diabetes Translation, CDC, 2017 Winter
- *"A Novel Risk Engine for Diabetes Progression and Mortality in the United States: Building, Relating, Acting, and Validating Outcomes (BRAVO)Model"*
  School of Pharmacy, Purdue University, 2017 April
- *"PSM/PSW Application in Survey Design and Multiple Group Scenario"*
  GHSD-8250 Advanced Research Methods, 2017 Spring
- *"PSM/PSW Application in Survey Design and Multiple Group Scenario"*
  GHSD-8250 Advanced Research Methods, 2016 Spring
- *"Linear Model: from beginning to the infinity and beyond"*
  GHSD-8250 Advanced Research Methods, 2016 Spring
- *"Decision Tree, Markov Model and TreeAge"*
  GHSD-7740 Economic Evaluation and Modelling, 2015 Fall
- *"Discrete Event Modelling: basics and advanced application"*
  GHSD-7740 Economic Evaluation and Modelling, 2015 Fall
- *"Alternative Method for Evaluating Observational Data: Propensity Score Matching"*
  GHSD-8250 Advanced Research Methods, 2015 Spring