YU-CHU SHEN

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EDUCATION

Harvard University Ph.D. in Health Policy (field: Health Economics), 2001

Harvard University A.B. with *magna cum laude* in Applied Mathematics (field: Decision and Control), 1996

PROFESSIONAL EXPERIENCES

2015—present	Professor of Economics, Department of Defense Management, Naval Postgraduate School, Monterey, CA
2018—2022	Associate Dean of Research, Graduate School of Defense Management, Naval Postgraduate School, Monterey, CA
2009—2015	Associate Professor of Economics (with tenure), Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA
2004—2009	Assistant Professor of Economics, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA
2020—present	Research Associate, National Bureau of Economic Research, Cambridge, MA
2004—2020	Faculty Research Fellow, National Bureau of Economic Research, Cambridge, MA
2001—2004	Research Associate, Health Policy Center, the Urban Institute, Washington, DC

PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. <u>Shen, Y.</u>, Heissel, JA., Bacolod, M. 2024 Core mental health provider capacity and utilization rates in the US military. *JAMA Netw Open (forthcoming)*.
- 2. Hsia, RY, Sarkar, N., and <u>Shen, Y.</u> 2024. Provision of stroke care services by community disadvantage status in the US, 2009-2022. *JAMA Netw Open (forthcoming)*.
- 3. Hsia, RY and <u>Shen, Y.</u> 2024. Structural inequities in the opening of percutaneous coronary intervention centers in the United States, 2000–2020. *Health Affairs, 43 (7):1011-1020. doi:* 10.1377/hlthaff.2023.01649.
- Hsia, RY, Redberg, RF., and <u>Shen, Y.</u> 2024. Is more better? A multi-level analysis of percutaneous coronary intervention hospital openings and closures on patient volumes. *Academic Emergency Medicine*, 31 (May): doi:10.11111/acem.14926.
- 5. Feldmeier F, Kim AS, Zachrison KS, Alberts MJ, <u>Shen Y</u>, and Hsia RY. 2024. Heterogeneity of state stroke center certification and designation processes. *Stroke* 55(4): 1051-1058.
- Hsia, RY and <u>Shen, Y.</u> 2023. Percutaneous coronary intervention–capable facility openings and acute myocardial infarction outcomes by patient race and community segregation. *JAMA Netw Open*. 2023;6(12):e2347311. doi:10.1001/jamanetworkopen.2023.47311

- Shen, Y., Bacolod, M., Heissel, JA. 2023. Propensity of US military personnel to seek mental health care when community psychiatric capacity changes. *JAMA Health Forum*. Published online October 6, 2023. doi:10.1001/jamahealthforum.2023.3330
- Shen, Y., Sarkar, N., Hsia, RY. 2023. Differential treatment and outcomes for heart attack patients in advantaged and disadvantaged communities. *Journal of the American Heart Association*. Published online August 30, 2023. doi: 10.1161/JAHA.122.030506
- Shen, Y., Krumholz, HM., and Hsia, RY. 2023. Do PCI facility openings and closures affect outcomes for AMI patients differently in high v. average-capacity markets? *JACC: Cardiovascular Interventions*, 16(10): 1129-1140. <u>https://doi.org/10.1016/j.jcin.2023.02.010</u>
- Bacolod, M., Heissel, JA. & <u>Shen, Y</u>. 2023. Spatial analysis of access to psychiatrists for U.S. military personnel and their families. *JAMA Network Open*; 6(1): e2249314. p. 1-13. doi: 10.1001/jamanetworkopen.2022.49314
- <u>Shen, Y.</u>, Sarkar, N., and Hsia, RY. 2022. Structural inequities for historically underserved communities in the adoption of stroke certification in the United States. *JAMA Neurology*;79(8):777-786. doi:10.1001/jamaneurol.2022.1621.
- Montoy JC, <u>Shen Y</u>, Hsia RY. 2022. Trends in inequities in the treatment of and outcomes for women and minorities with myocardial infarction. *Annals of Emergency Medicine*. 2022;80(2):108-117. doi:10.1016/j.annemergmed.2022.04.003
- Montoy, JC., <u>Shen, Y.</u>, Krumholz, HM., and Hsia, RY. 2021. Association of STEMI regionalization of care with de facto NSTEMI regionalization. *American Heart Journal* 242, 1-5. https://doi.org/10.1016/j.ahj.2021.07.002
- <u>Shen, Y.</u> and Hsia, RY. 2021. Differential benefits of cardiac care regionalization based on driving time to percutaneous coronary intervention. *Academic Emergency Medicine*, 28(5): 519-529. https://doi.org/10.1111/acem.14195
- <u>Shen, Y</u>., Krumholz, HM., Hsia, RY. 2021. Association of cardiac care regionalization with access, treatment, and mortality among patients with ST-elevation myocardial infarction. *Circulation: Cardiovascular Quality and Outcomes*. doi: 10.1161/CIRCOUTCOMES.120.007195. PMID: 33641339.
- Montoy, JC., <u>Shen, Y.</u>, Brindis, RG., Krumholz, HM., Hsia, RY. 2021. The impact of ST-segment elevation myocardial infarction (STEMI) regionalization programs on the treatment and outcomes of patients diagnosed with non-STEMI. *Journal of American Heart Association*, 10:e016932: 1-12. doi: 10.1161/JAHA.120.016932
- Hsia, RY, Krumholz, HM., <u>Shen, Y</u>. 2020. Evaluation of STEMI regionalization on access, treatment, and outcomes among adults living in nonminority and minority communities. *JAMA Network Open*. 2020;3(11):e2025874. doi:10.1001/jamanetworkopen.2020.25874
- Bacolod, M., Cunha, JM. & <u>Shen, Y</u>. 2020. "When Young Soldiers Drink: The Impact of Legal Access to Alcohol Among U.S. Army Soldiers," *Southern Economic Journal*, 87 (2): 576-607. https://doi.org/10.1002/soej.12463
- Hsia RY and <u>Shen Y.</u> 2019. Emergency department closures and openings: Spillover effects on patient outcomes in bystander hospitals. *Health Affairs 38(9): 1496-1504.* doi: 10.1377/hlthaff.2019.00125
- Shen Y, Chen G, Hsia RY. 2019. Community and hospital factors associated with stroke center certification in the United States, 2009 to 2017. *JAMA Network Open*. Published online July 26, 20192(7):e197855. doi:10.1001/jamanetworkopen.2019.7855

- Hsia RY, Sarkar, <u>Shen Y.</u> 2018. Is inpatient volume or emergency department crowding a greater driver of ambulance diversion? *Health Affairs (Millwood)*. 2018 Jul;37(7):1115-1122. doi: 10.1377/hlthaff.2017.1602.
- 22. Niedzwiecki, M.J., Hsia, R.Y., <u>Shen, Y.</u> 2018. Not all insurance is equal: Differential treatment and health outcomes by insurance coverage among nonelderly adult patients with heart attack. *Journal of the American Heart Association (DOI: 10.1161/JAHA.117.008152)*
- 23. Cunha, JM, <u>Shen, Y</u>., and Burke, ZR. 2018. Contrasting the impacts of combat and humanitarian assistance/disaster relief missions on the mental health of military service members. *Defence and Peace Economics, 29(1): 62-77 (DOI: 10.1080/10242694.2017.1349365).*
- 24. <u>Shen, Y.</u>, Arkes, J., and Lester, PB. 2017. Association between baseline psychological attributes and mental health outcomes after soldiers returned from deployment. *BMC Psychology* 5(1),32: 1-12 (DOI: 10.1186/s40359-017-0201-4).
- Hsia, RY., Sabbagh, S., Sarkar, N., Sporer, K., Rokos, I., Brown, J., Brindis, R., Guo, J., <u>Shen, Y.</u> 2017. Trends in regionalization of care for ST-segment elevation myocardial infarction. *Western Journal of Emergency Medicine*, 18 (6): 1010-1017 (DOI: 10.5811/westjem.2017.8.34592).
- 26. Hsia, RY., Sarkar, N., and <u>Shen, Y.</u> 2017. Impact of ambulance diversion: black patients with acute myocardial infarction had higher mortality than whites. *Health Affairs 36 (6):1070-1077*.
- Shen, Y. and Hsia, R. 2016. Association between emergency department closure and treatment, access, and health outcomes among patients with acute myocardial infarction. *Circulation 134 (20):1595-1597 (doi: 10.1161/CIRCULATIONAHA.116.025057)*.
- <u>Shen, Y</u>. Cunha J. and Williams, VW. 2016. Time-varying associations of suicide with deployments, mental health conditions, and stressful life events among current and former US military personnel: a retrospective multivariate analysis. *Lancet Psychiatry* 3(11): 1039-1048 (doi: 10.1016/S2215-0366(16)30304-2).
- 29. <u>Shen, Y.</u> and Wu, VY. 2016. Comparison of long-run trends in 30-day readmission by degrees of Medicare payment cuts. *Medical Care, 2016;54(9):891-8 (doi: 10.1097/MLR.00000000000579).*
- <u>Shen, Y</u>. and Hsia, R. 2016. Do patients hospitalized in high-minority hospitals experience more diversion and poorer outcomes? A retrospective multivariate analysis of Medicare patients in California. *BMJ Open 6(3)*: 1-10 (doi:10.1136/bmjopen-2015-010263). Available at <u>http://bmjopen.bmj.com/content/6/3/e010263.full.pdf+html</u>
- 31. Hsia, RY. and <u>Shen, Y.</u> 2016. Percutaneous coronary intervention in the United States: Risk factors for untimely access. *Health Services Research*, *51(2): 592–609* (doi: 10.1111/1475-6773.12335).
- Shen, Y. and Hsia, R. 2015. Ambulance diversion is associated with decreased access to technology, reduced likelihood of intervention, and increased mortality for cardiac patients. *Health Affairs*, 34(8): 1273-1280 (DOI: 10.1377/hlthaff.2014.1462). Chosen as Top 10 Editor Picks in 2015.
- 33. Cunha, J., Arkes, J., Lester, PB, and <u>Shen, Y.</u> 2015. Employee retention and psychological health: Evidence from military recruits, *Applied Economics Letters*, *22(18)*: 1505-1510 (Available online at http://dx.doi.org/10.1080/13504851.2015.1042136).
- Wu, V., <u>Shen, Y.</u>, Yun, M-S, and Melnick, G. 2014. Decomposition of the drivers of the US Hospital spending growth, *BMC Health Services Research*, 14:230 (DOI:10.1186/1472-6963-14-230). Available at http://www.biomedcentral.com/1472-6963/14/230
- 35. Wu, V. and <u>Shen, Y</u>. 2014. Long-term impact of Medicare payment reductions on patient outcomes. *Health Services Research*, 49(5): 1596-1615. Previous version: NBER Working Paper #16859.

- 36. Arkes, J. and <u>Shen Y</u>. 2014. For better or for worse, but what about a recession? *Contemporary Economic Policy*, 32(2): 275-287. Previous version: NBER Working Paper #16525.
- 37. Howard, D. and <u>Shen, Y</u>. 2014. Trends in PCI Volume after negative results from a comparative effectiveness research trial. *Health Services Research*, 49 (1, Part I): 153-170.
- Mohan, A., Fazel, R., Huang, P., <u>Shen, Y</u>., and Howard, D. 2013. Changes in geographic variation in percutaneous coronary intervention (PCI) for stable ischemic heart disease following publication of the COURAGE Trial. *Circulation: Cardiovascular Quality and Outcomes*, 7: 125-130.
- 39. <u>Shen, Y</u>. and Wu, V. 2013. Reductions in Medicare payments and patient outcomes: An analysis of five leading Medicare conditions. *Medical Care*, *51(11)*: 970-977.
- 40. Wu, V., <u>Shen, Y</u>., and Melnick, G. 2013. Competitive market forces and trends in U.S. hospital spending, 2001-2009. *Health*, 5(7): 1195-1200.
- Shen, Y., Sim, W., Caughey, A. B., Howard, D. H. 2013. Can major systematic reviews influence practice patterns? A case study of episiotomy trends. *Archives of Gynecology and Obstetrics, 288* (6): 1285-1293.
- 42. <u>Shen, Y</u>., Arkes, J., and Williams, T. V. 2012. Effects of Iraq/Afghanistan deployments on major depression and substance use disorder: Analysis of active duty personnel in U.S. military. *American Journal of Public Health*, *102 (March, S1)*: S80-S87.
- 43. <u>Shen, Y</u>. and Hsia, R. Y. 2012. Does decreased access to emergency departments affect patient outcomes? Analysis of AMI population 1996-2005. *Health Services Research*, 47(1, Part 1): 188-210. Previous version: NBER Working Paper #16690.
- 44. Hsia, R. Y. and <u>Shen, Y</u>. 2011. Rising closures of hospital trauma centers disproportionately burden vulnerable populations. *Health Affairs*, *30 (10)*: 1912-1920.
- 45. Melnick, G., <u>Shen, Y.</u>, and Wu, V. 2011. The increased concentration of health plan markets can benefit consumers through lower hospital prices. *Health Affairs*, *30* (9): 1728-1733.
- 46. <u>Shen, Y</u>. and Hsia, R. Y. 2011. Association between ambulance diversion and survival of patients with acute myocardial infarction. *JAMA*, *305 (23)*: 2440-2447.
- 47. Hsia, R. Y., Kellermann, A., and <u>Shen, Y</u>. 2011. Factors associated with closures of emergency departments in the United States. *JAMA*, 305 (19): 1978-1985.
- Hsia, R. Y. and <u>Shen, Y</u>. 2011. Are there geographical barriers to trauma center access for underserved patients in the United States? An analysis of urban and rural communities. *Archives of Surgery*, 146(1): 46-52.
- 49. Eggleston, K. and <u>Shen, Y</u>. 2011. Soft budget constraints and ownership: Empirical evidence from U.S. hospitals. *Economics Letters*, *110 (1)*: 7-11.
- <u>Shen, Y</u>., Arkes, J., Kwan, B., Tan, L. and Williams, T. V. 2010. Effects of Iraq/Afghanistan deployments on PTSD diagnoses for still active personnel in all four services. *Military Medicine*, 175 (10): 763-769. Previous version: NBER Working Paper #15203.
- <u>Shen, Y</u>. and Hsia, R. Y. 2010. Changes in emergency department access between 2001 and 2005: Are vulnerable populations more at risk for declines in access? *American Journal of Public Health*, 100 (8):1462-1469.
- Shen, Y., Wu, V., and Melnick, G. 2010. Trends in hospital cost and revenue, 1994-2005: How are they related to HMO penetration, concentration and for-profit ownership. *Health Services Research*, 45 (1): 42-61. Previous version: NBER Working Paper #13775.

- 53. <u>Shen, Y.</u>, Hsia, R. Y., and Kuzma, K. 2009. Understanding the risk factors of trauma center closures: Do financial pressure and community characteristics matter? *Medical Care*, 47(9): 968-978.
- <u>Shen, Y</u>. and Eggleston, K. 2009. The effect of soft budget constraints on access and quality in hospital care. *International Journal of Healthcare Finance and Economics*, 9(2): 211-232. Previous version: NBER Working Paper #14256.
- 55. Eggleston, K., <u>Shen, Y</u>., Lu, M., Li, C., Wang, J., Yang, Z., and Zhang, J. 2009. Soft budget constraints in China: Evidence from the Guangdong Hospital Industry. *International Journal of Healthcare Finance and Economics*, 9(2): 233-242.
- 56. <u>Shen, Y.</u>, Arkes, J., and Pilgrim, J. 2009. The effects of deployment intensity on post-traumatic stress disorder: 2002-2006. *Military Medicine*, 174 (3): 217-223.
- 57. <u>Shen, Y</u>. 2009. Do HMO and its for-profit expansion jeopardize the survival of hospital safety net services? *Health Economics*, *18(3)*: 305-320. Previous version: NBER Working Paper #12374.
- Eggleston, K., <u>Shen, Y</u>., Schmid, C., Lau, J., and Chan, J. 2008. Hospital ownership and quality of care: What explains the different results in the literature? *Health Economics*, *17(12)*: 1345-1362. Previous version: NBER Working Paper #12241.
- 59. Shen, Y. and Melnick, G. A. 2007. Is managed care still an effective cost containment device? Forum for Health Economics & Policy: Vol. 9: Iss. 1 (Frontiers in Health Policy Research), Article 3. http://www.degruyter.com/view/j/fhep.2006.9.1/fhep.2006.9.1.1007/fhep.2006.9.1.1007.xml?rskey= pkOdow&result=1
- 60. <u>Shen, Y</u>., Eggleston, K., Schmid, C., and Lau, J. 2007. Hospital ownership and financial performance: What explains the different empirical literature findings? *Inquiry*, *44 (1)*: 41-68. Previous version: NBER Working Paper #11662.
- 61. <u>Shen, Y</u>. and Long, S. 2006. What's driving the downward trend in employer sponsored health insurance? *Health Services Research*, *41(6)*: 2074-2096.
- <u>Shen, Y</u>. and McFeeters, J. 2006. Out-of-pocket health spending between low- and high-income populations: Who is at risk of having high expenses and financial burdens? *Medical Care 44(3)*: 200-209. Previous version: NBER Working Paper #11179.
- 63. Coughlin, T., Long, S., and <u>Shen, Y</u>. 2005. Assessing access to care under Medicaid: Evidence for the nation and thirteen states. *Health Affairs 24 (4)*: 1073-1083.
- 64. <u>Shen, Y</u>. and Zuckerman, S. 2005. The effect of Medicaid payment generosity on access and use among Medicaid beneficiaries. *Health Services Research 40(3)*: 723-744.
- 65. <u>Shen, Y</u>. and Melnick, G. A. 2004. The effects of HMO ownership on hospital costs and revenues: Is there a difference between for-profit and not-for-profit plan? *Inquiry 41(3)*: 255-267.
- 66. Long, S. and <u>Shen, Y</u>. 2004. Low-income workers with employer-sponsored insurance: Who's at risk when employers drop coverage? *Medical Care Research and Review 61(4)*: 474-494.
- 67. Zuckerman, S. and <u>Shen, Y</u>. 2004. Characteristics of occasional and frequent emergency department users: Do insurance coverage and access to care matter? *Medical Care 42(2)*: 176-182.
- 68. <u>Shen, Y</u>. 2003. Changes in hospital performance after ownership conversions. *Inquiry 40 (3)*: 217-234.
- 69. Holahan, J., Nichols, L. M., Blumberg, L. J., and <u>Shen, Y</u>. 2003. A new approach to risk spreading via coverage expansion subsidies. *American Economic Review 93 (2)*: 277-282.

- 70. <u>Shen, Y</u>. 2003. The effect of financial pressure on the quality of care in hospitals. *Journal of Health Economics 22 (2)*: 243-269.
- 71. <u>Shen, Y</u>. and Zuckerman, S. 2003. Why is there state variations in employer-sponsored insurance? *Health Affairs 22 (1)*: 241-251.
- 72. <u>Shen, Y</u>. 2002. The effect of ownership choice on patient outcomes after treatment for acute myocardial infarction. *Journal of Health Economics 21 (5)*: 901-922.
- 73. Barnett, R. and <u>Shen, Y</u>. 1997. Gender, high-low-schedule-control household tasks and psychological distress: A study of dual-earner couples. *Journal of Family Issues 18 (4)*: 403-428.

PEER-REVIEWED BOOK CHAPTERS

- 74. Howard, D. and <u>Shen, Y</u>. 2012. Comparative effectiveness research, technological abandonment, and health care spending. *Advances in Health Economics and Health Services Research, Volume 23*: 103-121. Chosen as an Outstanding Author Contribution Award Winner at the *Literati Network Awards for Excellence 2013*.
- Eggleston, K. and <u>Shen, Y</u>. 2006. Ownership and performance of health service organizations: Evidence from hospitals. *Global Forum Update on Research for Health*, 3rd annual volume: 142-145.

TECHNICAL REPORTS AND POLICY PAPERS

- 1. Hsia, RY. and <u>Shen, Y</u>. 2023. Do PCI Facility Openings Differentially Affect AMI Patients by Individual Race and Community Segregation? *NBER Working Paper #31626*.
- 2. <u>Shen, Y.</u> Ahn, S., Knutson, M. 2021. Applying predictive analytics as screening tools in medical review process in the United States Military Entrance Processing Command: Phase I report. *NPS Technical Report*.
- 3. <u>Shen, Y.</u> Cunha, JM., Heissel, J. 2020. Analysis of unit variation and peer influence of destructive behaviors in the U.S. military. *NPS Technical Report NPS-GSDM-20-002*.
- 4. Bacolod, M. Cunha, JM. <u>Shen, Y.</u> The Impact of Alcohol on Mental Health, Physical Fitness, and Job Performance. *NBER Working Paper #23542*.
- 5. <u>Shen, Y</u>. and Hsia, RY. 2016. Geographical distribution of emergency department closures and consequences on heart attack patients. *NBER Working Paper #22861*.
- 6. <u>Shen, Y.</u> and Cunha, JM. 2016. An analysis of time-varying risk factors of suicide behaviors in the U.S. military. *NPS Technical Report NPS-GSBPP-16-002*.
- 7. Wu, V. Y. and <u>Shen, Y</u>. 2015. Evaluation of the impact of Medicare payment cuts on treatment process and outcomes for Medicare patients. *Technical Report to Medicare Trustee. Office of Actuary, Centers for Medicare and Medicaid Services.*
- 8. Wu, V. Y. and <u>Shen, Y</u>. 2013. Evaluation of long-term effects of 1997 Balanced Budget Act inpatient Medicare payment cuts. *Technical Report to Medicare Trustee. Office of Actuary, Centers for Medicare and Medicaid Services.*
- 9. Howard, D. and <u>Shen, Y</u>. 2011. Comparative effectiveness research, COURAGE, and technological abandonment. *NBER Working Paper #17373*.
- <u>Shen, Y</u>. and Arkes, J. 2009. Effects of OEF/OIF deployment intensity on PTSD diagnoses among still active population: Analysis of enlisted and officer population 2001-2006. *NPS Technical Report*, *NPS-GSBPP-09-034*.

- 11. Lin, K. and <u>Shen, Y</u>. 2008. A game-theoretic model for jamming radio controlled improvised explosive devices. *NPS Technical Report, NPS-OR-09-004*.
- 12. <u>Shen, Y</u>., Waidmann, T., and Zuckerman, S. 2007. What explains racial and ethnic disparities in insurance coverage and access to care? Manuscript.
- 13. Zuckerman, S. and <u>Shen, Y</u>. 2004. Did recent payment rate increases improve access and use among Medi-Cal beneficiaries? *Policy Report to the California HealthCare Foundation*.
- 14. Blumberg, L. J. and <u>Shen, Y</u>. 2003. The effects of introducing federally licensed association health plans in California: A quantitative analysis. *Policy Report to the California HealthCare Foundation*.
- 15. <u>Shen, Y</u>., Liu, K., Kramer, A., Maxwell, S., Garrett, A. B., and Wissoker, D. 2003. What explains therapy cost in skilled nursing facilities? The feasibility of using clinical characteristics in a payment system. *Interim Analysis Report to the Centers of Medicare & Medicaid Services (CMS)*.
- 16. Blumberg, L. J. and <u>Shen, Y</u>. 2003. Using the Urban Institute's Health Insurance Reform Simulation Model (HIRSM) to produce state-specific results. *Report to Robert Wood Johnson Foundation*.
- Blumberg, L. J., <u>Shen, Y</u>., Nichols, L. M., Buettgens, M., Dubay, L. C., and McMorrow, S. 2003. The Health Insurance Reform Simulation Model (HIRSM): Methodological detail and prototypical simulation results. *Final Report to the U.S. Department of Labor, PWBA, July 2003.* Available at <u>http://www.urban.org/url.cfm?ID=410867</u>

HONORS

2023	Navy Meritorious Civilian Service Award, Department of the Navy
2014	Menneken Faculty Award for Excellence in Scientific Research, Naval Postgraduate School
2011 - 2023	Special Act Award, Naval Postgraduate School GSBPP
2008	Significant Contributor Award, Naval Postgraduate School GSBPP

ACTIVE SPONSORED RESEARCH

National Institute of Health, 1R01MD017482. Structural racism and discrimination in the expansion of hospital stroke care capacity: a multi-level analysis on access to care, treatment, and outcomes. 5/2022-4/2026. *Managing Principal Investigator (with Renee Y. Hsia)*.

National Institute of Health, 2R01HL134182. Expansion of percutaneous coronary intervention in outpatient and inpatient settings: quantifying the differential impact between disadvantaged and non-disadvantaged communities. 8/2023-6/2027. *Partnering Principal Investigator (with Renee Y. Hsia)*.

Defense Health Agency Military Health Systems Research Program, DHA-19-HSR-NPS-20-400-2263. Geographical variation in civilian and military mental health resource capacity and its effects on mental health readiness of the U.S. military. 06/2020-9/2024. *Principal Investigator*.

COMPLETED SPONSORED RESEARCH

National Institute of Health, 2R01HL114822. Effects of percutaneous coronary intervention lab openings and closures on patients, hospitals, and communities. 7/2017-4/2023. *Managing Principal Investigator (with Renee Y. Hsia)*.

U.S. Military Entrance Processing Command (USMEPCOM). Applying predictive analytics in assessing health conditions of applicants. 12/1/2020-9/30/2022. *Principal Investigator*.

Navy, N17Z. Analysis of the role of service-specific risk factors in military suicides and mental health illnesses. 01/20/2018-12/31/2019. *Co-Principal Investigator (with Jesse Cunha)*.

US Army, Office of the Deputy Chief of Staff. Resilience Economic Analysis. 8/2015-12/2016. *Principal Investigator.*

National Institute of Health, 1R56HL121108/R01HL134182. The Impact of Cardiac Care Regionalization on Access, Treatment, and Outcomes. 9/2014-6/2021. *Co-Investigator*

Navy, Chief of Naval Personnel. Analysis of Suicide Evolution in the Navy Population. 10/2014-9/2016. *Principal Investigator*.

Center for Medicare and Medicaid Services, Office of Actuary. HHSM-500-2013-00232P. Evaluation of Long Term Impacts of Medicare Payment Cuts Phase II. 9/2013-9/2014. *Co-Principal Investigator (with Vivian Wu, USC)*.

National Institute of Health, 1R01HL114822. Effect of Emergency Care Availability on Racial Disparities in Access & Outcomes. 8/2012-6/2017. *Principal Investigator*.

US Army, Office of the Deputy Chief of Staff. Evaluation of Army Comprehensive Soldier and Family Fitness Program (Phase I-III). 8/2012-12/2015. *Principal Investigator*.

American Heart Association National Clinical Research Program Award. Does ED Access Block Contribute to the Widening of Disparities in Outcomes for Cardiovascular Disease? 01/2013-12/2015. *Co-Investigator*

Center for Medicare and Medicaid Services, Office of Actuary. HHSM-500-2011-00139P. Evaluation of Long Term Impacts of Medicare Payment Cuts. 10/2011-9/2012. *Co-Principal Investigator (with Vivian Wu, USC)*.

Navy Manpower, Personnel, Training and Education Organization (N1 MPT&E). The Effect of Combat Exposure on Reenlistment and Attrition. 10/2010-12/2011. *Principal Investigator*.

Navy Manpower, Personnel, Training and Education Organization (N1 MPT&E). The Effect of Deployment Intensity on the Prevalence of Depression and Substance Abuse incidences in the Active Duty Population: 2001-2006. 10/2009-12/2010. *Principal Investigator*.

Navy Manpower, Personnel, Training and Education Organization (N1 MPT&E). Economic Analysis of Post-Traumatic Stress Disorder in the GWOT Environment. 2/2009-9/2009. *Principal Investigator*.

The Joint IED Defeat Organization. Game-Theoretic Models for Jamming RCIEDs and Red Teaming. 1/2008-6/2009. *Co-Principal Investigator (with Kyle Lin, NPS)*.

Robert Wood Johnson Foundation (HCFO), #63974. Effects of Decreased Emergency Department Access on Patient Outcomes. 4/2008-11/2010. *Principal Investigator*.

UCSF, grant #UL1 RR024131-01. Socioeconomics Disparities in Access to Emergency and Trauma Care. 6/2008-6/2009. *Co-Investigator*.

Naval Postgraduate School GSBPP Direct Funded Research Program. Economic Analysis of Post-Traumatic Stress Disorder in the GWOT Environment. *Principal Investigator*.

Robert Wood Johnson Foundation (HCFO), #56110. The Effect of Health Plan Concentration on Hospital Prices, Costs, Capacity, Charity Care and Outcomes. 2/2006-1/2008. *Co-Principal Investigator (with Glenn Melnick, USC)*.

Naval Postgraduate School Research Initiative Program. Effects of Organizational and Market Changes on Hospital Behavior. 10/2004–9/2006. *Principal Investigator*.

Robert Wood Johnson Foundation (HCFO), #050953. Hospital Ownership and Performances: An Integrative Research Review. 6/2004-11/2005. *Co-Principal Investigator (with Karen Eggleston, Tufts)*.

University of Southern California, #07398-000-00. Analysis of Hospital Data. 1/2002-8/2004. *Principal Investigator.*

TEACHING

Defense Management, Naval Postgraduate School. Instructor Economics in the Global Defense Environment Economics for Defense Managers Fundamentals of Cost Benefit Analysis Multivariate Data Analysis I Economic Analysis and Defense Resource Allocation Advanced Topics in Manpower Policy Evaluation Directed Study in Health Policy

National Yang Ming University, Taipei Taiwan. Instructor Intensive Course on "Applied Econometrics for Health Care Data" December 2012

Kennedy School of Government, Harvard University. Teaching fellow Regulation and Management in the Health Care System Quantitative Analysis and Empirical Methods

PERSONAL

Female; Fluent in English and Mandarin; US citizen.