

Kao-Ping Chua, MD, PhD
Assistant Professor of Pediatrics
Susan B. Meister Child Health Evaluation and Research Center
University of Michigan Medical School
300 North Ingalls Drive, SPC 5456, Room 6E18, Ann Arbor, Michigan 48109-5456
Phone: 734-615-6189
Fax: 734-232-1400
E-mail: chuak@med.umich.edu

Education and Training

Education

08/1998-05/2002	BS in Neuroscience, <i>summa cum laude</i> , Vanderbilt University, Nashville, TN
08/2002-05/2007	MD, Washington University School of Medicine, St. Louis, MO
08/2011-05/2015	PhD in Health Policy (Evaluative Sciences and Statistics concentration), Harvard University, Cambridge, MA

Postdoctoral training

07/2007-06/2010	Residency in Pediatrics, Boston Combined Residency Program (Boston Children's Hospital and Boston Medical Center), Boston, MA
07/2010-06/2010	Postdoctoral Research Fellow, Harvard Pediatric Health Services Research Fellowship, Boston, MA

Certification and Licensure

Certification

10/2010-present	American Board of Pediatrics, Certificate #96996
-----------------	--

Licensure

07/2010-06/2015	State of Massachusetts, License #242746
06/2015-09/2017	State of Illinois, License #036.138203
10/2017-present	State of Michigan, License #4301113525

Academic, Administrative, Clinical, Research and Military Appointments

Academic appointments

07/2015-09/2017	Assistant Professor of Pediatrics, University of Chicago, Chicago, IL
07/2015-09/2017	Assistant Professor of Public Health Sciences, University of Chicago, Chicago, IL

10/2017-present Clinical Assistant Professor in Pediatrics, University of Michigan Medical School, Ann Arbor, MI

Clinical appointments

07/2010-06/2015 Urgent Care Attending, Boston Children's Hospital Emergency Department, Boston, MA

07/2010-06/2015 Urgent Care Attending, South Shore Hospital Emergency Department, Weymouth, MA

10/2017-present Primary Care Physician, Department of Pediatrics and Communicable Diseases, University of Michigan Medical School, Ann Arbor, MI

Research appointments

07/2010-06/2012 Research Fellow, Boston Children's Hospital, Boston, MA

Gaps

07/2004-06/2005 Jack Rutledge Fellow, American Medical Student Association. Between my third and fourth year of medical school, I worked at the American Medical Student Association's national office in Reston, VA. I led the organization's efforts to ensure universal access to health care and to eliminate health care disparities.

Research Interests

As a practicing general pediatrician with doctoral training in health policy, I combine a clinical perspective with rigorous methods to conduct research that is relevant to both patients and policymakers. A major area of my research is opioid prescribing and policy. For example, I demonstrated that the 2013 FDA black box warning against the use of codeine among children undergoing tonsillectomy and/or adenoidectomy was associated with substantial but incomplete reductions in inappropriate codeine prescribing in this scenario. A second major area of my research is overuse of health care services in pediatrics. For example, I translated recommendations from sources such as Choosing Wisely into 20 measures that identify inappropriate pediatric services in claims data, including 5 measures related to antibiotic overuse. Using these measures and claims from 4.4 million commercially insured children across the U.S., I found that at least 10% of children received one of the 20 low-value services in 2014. A final major area of my research is prescription drug utilization and spending. For example, I demonstrated that annual out-of-pocket spending on the EpiPen increased by 123% between 2007 and 2014 among commercially insured patients with severe allergies, largely due to price increases imposed by the manufacturer during this period.

Grants

Current Grants

Institute for Health Policy and Innovation (University of Michigan)
Design and Implementation Problems for Opioid Prescribing Limits for Acute Pain
Principal investigator: Kao-Ping Chua
11/2018-07/2019
Role: PI
\$10,000

Jannette Ferrantino Award (University of Michigan)
A National Profile of Opioid Prescribing to Children
Principal Investigator: Kao-Ping Chua
05/2018-05/2019
Role: PI
\$40,000

Academic Pediatric Association Young Investigator Award
Predictors of Overuse in Pediatrics
Principal Investigator: Kao-Ping Chua
03/2017-04/2019
Role: PI
\$8,697

Past Grants

Institute for Translational Medicine Pilot Grant (University of Chicago)
Use of Low-Value Pediatric Services in the Medicaid Population
Principal Investigator: Kao-Ping Chua
06/2016-06/2017
Role: PI
\$32,575

NIH Loan Repayment Program (Health Disparities)
The Effect of Health Insurance Loss on Health Outcomes at Age 19
Principal Investigator: Kao-Ping Chua
07-2011-06/2013
Role: PI

NRSA T32 training grant (NRSA T32-HS00063)
Harvard Pediatric Health Services Research Fellowship
Principal Investigator: Jonathan Finkelstein
03/2017-04/2019
Role: Trainee

Fred Lovejoy Resident Research and Education Award (Boston Children's Hospital)
"Effect of Implementing a Night Team System on Resident Sleep/Work Hours
Principal Investigator: Kao-Ping Chua
07/2009-06/2010
Role: PI
\$5,000

Honors and Awards

Institutional

1998-2002	Harold Stirling Vanderbilt Scholarship, Vanderbilt University (full-tuition academic scholarship)
2002	Runner-up for Founder's Medal, Vanderbilt University (award for the top student in the College of Arts & Sciences)
2002-2007	Distinguished Student Scholarship, Washington University School of Medicine (full-tuition academic scholarship)
2004	Harrison Scholar, Washington University School of Medicine (award for the top medical students in internal medicine)
2007	George F. Gill Prize in Pediatrics, Washington University School of Medicine (award for the top medical students in pediatrics)

National

2017	Academic Pediatric Association Young Investigator Award
------	---

Memberships in Professional Societies

2007-present	American Academy of Pediatrics
2010-present	AcademyHealth
2014-present	Academic Pediatric Association
2015-present	Society for Pediatric Research, Junior Section

Editorial Positions, Boards, and Peer-Review Services

Journal Reviewer

2014-present	<i>Milbank Quarterly</i>
2014-present	<i>Journal of Adolescent Health</i>
2015-present	<i>Health Services Research</i>
2015-present	<i>The Journal of Pediatrics</i>
2016-present	<i>Medical Care</i>
2017-present	<i>Public Health Reports</i>
2017-present	<i>American Journal of Public Health</i>
2018-present	<i>Medical Care Research and Review</i>
2018-present	<i>Academic Pediatrics</i>
2018-present	<i>Pediatrics</i>
2018-present	<i>Journal of Addictive Diseases</i>
2018-present	<i>JAMA Network Open</i>

Teaching Activity

Institutional

2013	Harvard Kennedy School Teaching Fellow. Course: "Quantitative Analysis and Empirical Methods." One semester, 20 lectures, 50 Masters of Public Policy graduate students
2015-2017	Pritzker School of Medicine Guest Lecturer ("Health Insurance 101") Course: The American Health Care System. 1 lecture, 80 first-year medical students
2015-2017	Pritzker School of Medicine Guest Lecturer ("Regression Analysis") Course: Introduction to Medical Evidence. 2 lectures, 80 first-year medical students

Mentoring

University of Chicago, Department of Public Health Sciences 2015-2017

Thesis advisor for Masters of Science for Clinical Professionals program:

- Elizabeth Tung, M.D., General Internal Medicine Fellow, Section of General Internal Medicine, Department of Medicine, University of Chicago
- Olga Kantor, M.D., General Surgery Resident, University of Chicago
- Joyce Hsu, M.D., Pediatrics Resident, Comer Children's Hospital, University of Chicago
- Anna Volerman-Beaser, M.D., Assistant Professor of Medicine and Pediatrics, University of Chicago

Committee and Administrative Services

Committee Services

Institutional

2015-2017	Medicaid Working Group, University of Chicago, Co-Chair
2017-present	Institute for Healthcare Policy and Innovation, University of Michigan, Member
2017-present	University of Michigan Injury Center, University of Michigan, Member
2018-present	Center for Study of Drugs, Alcohol, Smoking and Health, University of Michigan, Faculty Affiliate
2018-present	Institute for Research on Women and Gender, University of Michigan, Faculty Affiliate

Visiting Professorships, Seminars, and Extramural Invited Presentations

Extramural invited presentations

1. Effects of implementing a night team system on resident sleep and work hours. Platform presentation, Pediatric Academic Societies 2010 Annual Meeting, Vancouver, British Columbia, Canada, May 2010.

2. Differences in health care access and utilization between older adolescents and young adults with asthma. Transition to Adult Care Conference, Brigham and Women's Hospital, Boston, MA, January 2013.
3. Prevalence and predictors of substitutable ED visits by children. Platform presentation, Pediatric Academic Societies 2016 Annual Meeting, Boston, MA, May 2016.
4. Defining and measuring overuse in pediatrics. Dartmouth University Department of Pediatrics Grand Rounds, Hanover, NH, October 2017.
5. Why should we care about low-value pediatric care? University of Chicago Advancing Pediatric Quality Symposium, Chicago, IL, 2018.

Seminars

1. Why should we care about low-value pediatric care? University of Michigan Department of Pediatrics and Communicable Diseases Grand Rounds, Ann Arbor, MI, 2018.

Publications

Peer-Reviewed Publications

1. **Chua KP**, Chun MM. Implicit scene learning is viewpoint dependent. *Perception & Psychophysics*. 2003;65(1):72-80. PMID: 12699310
2. Kelley TA, Chun MM, **Chua KP**. Effect of scene inversion on change detection of targets matched for visual salience. *Journal of Vision*. 2003;3(1):1-5. PMID: 12678620
3. **Chua KP**, Gordon MB, Sectish TC, Landrigan CP. Effects of a night team system on resident sleep and work hours. *Pediatrics*. 2011;128(6):1142-1147. PMID: 22123867
4. **Chua KP**, Schuster MA, McWilliams JM. Differences in health care access and utilization between older adolescents and young adults with asthma. *Pediatrics*. 2013;131(5):892-901. PMCID: PMC4074656
5. **Chua KP**, Sommers BD. Changes in health and medical spending among young adults under health reform. *JAMA*. 2014; 311(23):2437-2439. PMID: 24938568
6. **Chua KP**, Neuman MI, McWilliams JM, Aronson PL. Association between clinical outcomes and hospital guidelines for cerebrospinal fluid testing in febrile infants 29-56 days of age. *J Pediatr* 2015; 167:1340-1346.e9. PMCID: PMC5535778
7. Sommers BD, **Chua KP**, Kenney JM, Long SK, McMorrow S. California's early coverage expansion under the Affordable Care Act: a county-level analysis. *HSR* 2016; 51(3):825-845. PMCID: PMC4874826
8. Tung EL, Baig AA, Laiteerapong N, Huang ES, **Chua KP**. Racial and ethnic disparities in diabetes screening between Asian Americans and other adults. *J Gen Intern Med* 2016; 32(4): 423-429. PMCID: PMC5377880

9. **Chua KP**, Schwartz AL, Volerman A, Conti RM, Huang ES. Use of low-value pediatric services among the commercially insured. *Pediatrics* 2016; 138(6): e20161809. PMID: 28246345
10. **Chua KP**, Conti RS. Out-of-pocket spending among commercially insured patients for epinephrine autoinjectors between 2007 and 2014. *JAMA Intern Med* 2017; 177(5):736-739. PMID: 28346591
11. Trueger NS, **Chua KP**, Hussain A, Liferidge AT, Pitts SR, Pines JM. Incorporating variability in alternative care site characteristics into estimates of substitutable emergency department visits. *Med Care*. 2017; 55(7):693-697. PMID: 28498199
12. **Chua KP**, Shrime MG, Conti RS. Effect of FDA investigation on opioid prescribing to children after tonsillectomy/adenoidectomy. *Pediatrics*, 2017;140(6): e20171765. PMID: 29146621
13. **Chua KP**, Conti RS, Freed GA. Appropriately framing child health care spending – a pre-requisite for value improvement. *JAMA* 2018; 319(11):1087-1088. PMID: 29482195
14. **Chua KP**, Conti RS. Out-of-pocket spending on orphan drugs among commercially insured adults. *J Gen Intern Med*. Oct 15, 2018. doi: 10.1007/s11606-018-4694-1. PMID: 30324293
15. McCabe SE, Wilens TE, Boyd CJ, **Chua KP**, Voepel-Lewis T, Schepis TS. Age-specific risk of substance use disorders associated with controlled medication use and misuse subtypes in the United States. *Addict Behav*. 2019 Mar; 90:285-293. PMID: 30472537
16. **Chua KP**, Fischer MA, Linder JA. Appropriateness of outpatient antibiotic prescribing among privately insured US patients: ICD-10-CM based cross sectional study. *BMJ*. 2019;364:k5092. PMID: 30651273
17. **Chua KP**, Brummett CM, Waljee JF. Opioid prescribing limits for acute pain: potential problems with design and implementation. *JAMA*. 2019. doi:10.1001/jama.2019.0010
18. Harbaugh CM, Lee JS, **Chua KP**, Kenney B, Iwashyna TJ, Englesbe MJ, Brummett CM, Bohnert ASB, Waljee JF. Association between chronic opioid use in family members and persistent opioid use after surgery among adolescents and young adults. *JAMA Surgery* (in press).