

Kao-Ping Chua, MD, PhD  
Assistant Professor of Pediatrics and Communicable Diseases  
Child Health Evaluation and Research Center  
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## Education and Training

<b>Harvard University</b> , Cambridge, MA Ph.D., Health Policy (Evaluative Sciences and Statistics concentration)	08/11-05/15
<b>Boston Children's Hospital</b> , Boston, MA Harvard Pediatric Health Services Research Fellowship	07/10-06/12
<b>Boston Children's Hospital &amp; Boston Medical Center</b> , Boston, MA Intern and Resident in Pediatrics, Boston Combined Residency Program	07/07-06/10
<b>Washington University School of Medicine</b> , St. Louis, MO M.D.	08/02-05/07
<b>Vanderbilt University</b> , Nashville, TN B.S. in Neuroscience, <i>summa cum laude</i>	08/98-05/02

## Certification and Licensure

Michigan medical license, License #4301113525	10/17- present
Illinois medical license, License #036.138203	06/15-09/17
American Board of Pediatrics, Certificate #96996	10/10- present
Massachusetts medical license, License #242746	07/10-06/15

## Academic, Administrative, and Clinical Appointments

Academic appointments

**University of Michigan**

Assistant Professor, Department of Pediatrics and Communicable Diseases  
Child Health Evaluation and Research Center

10/17-  
present

07/15-09/17

**University of Chicago**

Assistant Professor, Department of Pediatrics, Section of Academic Pediatrics  
Assistant Professor, Department of Public Health Sciences

Clinical appointments

Primary Care Physician, University of Michigan, Department of Pediatrics and Communicable Diseases

10/17-  
present

Urgent Care Attending, Emergency Department, Comer Children's Hospital

07/15-09/17

Urgent Care Attending, Emergency Department, Boston Children's Hospital

07/10-06/15

**Research Interests**

I am a practicing general pediatrician with doctoral training in health policy. I combine a clinical perspective with my quantitative training to conduct pediatric health services research that is relevant to both patients and policy.

One major area of my research is overuse of health care services in pediatrics. In one study, I used a difference-in-differences approach and administrative data from 32 U.S. children's hospitals to demonstrate the lack of health benefits from clinical practice guidelines that recommend universal cerebrospinal fluid testing in the emergency department for infants aged 29-56 days with fever. In another study, I conducted the first large-scale analysis of overuse in pediatrics across a variety of conditions and settings. To address the dearth of pediatric overuse measures, I translated consensus-based 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, resulting in \$27 million in spending and \$9 million in out-of-pocket spending.

Another major area of my research is insurance coverage and out-of-pocket spending. In a study published in *Pediatrics*, I used longitudinal data from the Medical Expenditure Panel Survey to demonstrate that older adolescents with asthma who lose insurance coverage around age 19 are less likely to receive high-quality asthma care. In a study published in *JAMA*, I used a difference-in-differences approach and data from the

Medical Expenditure Panel Survey to demonstrate that implementation of the Affordable Care Act dependent coverage provision was associated with improved self-reported health and financial protection among young adults. Finally, in a study published in *JAMA Internal Medicine*, I demonstrated that among commercially insured patients who use the EpiPen, annual out-of-pocket spending on the medication increased by 123% between 2007-2014.

## Grants

### Present and Active

**Academic Pediatric Association** 03/17-03/18  
 “Predictors of Overuse in Pediatrics”  
 Academic Pediatric Association Young Investigator Award  
 Role: PI  
 Amount: \$8,697

### Previous Grants

**University of Chicago** 06/16-06/17  
 “Use of Low-Value Pediatric Services in the Medicaid Population”  
 Institute for Translational Medicine Pilot Grant  
 Role: PI  
 Amount: \$32,575

**National Institutes of Health** 07/11-06/13  
 “The Effect of Health Insurance Loss on Health Outcomes at Age 19”  
 Health Disparities Loan Repayment Program  
 Role: PI

**Harvard Pediatric Health Services Research Fellowship** 07/10-06/12  
 NRSA T32 training grant (NRSA T32-HS00063)  
 Boston Children’s Hospital  
 Role: Trainee

**Boston Children’s Hospital** 07/09-06/10  
 “Effect of Implementing a Night Team System on Resident Sleep/Work Hours”  
 Fred Lovejoy Resident Research and Education Award  
 Role: PI  
 Amount: \$5,000

## Honors and Awards

Academic Pediatric Association Young Investigator Award	2017
George F. Gill Prize in Pediatrics, Washington University School of Medicine	2007
- Award for the top medical students in pediatrics from each class	
Harrison Scholar, Washington University School of Medicine	2004
- Award for the top medical students in internal medicine from each class	
	2003
Dames Prize in Physiology, Washington University School of Medicine	
- Award for the best paper on physiology	
	2002-2007
Distinguished Student Scholarship, Washington University School of Medicine	
- Full-tuition academic scholarship	
	2002
Runner-up for Founder's Medal, Vanderbilt University	
- Award for the top student in the College of Arts & Sciences	
	1998-2002
Harold Stirling Vanderbilt Scholarship, Vanderbilt University	
- Full-tuition academic scholarship	

## Memberships in Professional Societies

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

## Editorial Positions, Boards, and Peer-Review Services

### Peer-Reviewed Services

Reviewer, <i>Milbank Quarterly</i>	2014-present
Reviewer, <i>Journal of Adolescent Health</i>	2014-present
Reviewer, <i>Health Services Research</i>	2015-present
Reviewer, <i>The Journal of Pediatrics</i>	2015-

Reviewer, <i>Medical Care</i>	present 2016-
Reviewer, <i>Public Health Reports</i>	present 2017- present

## Teaching

### Formal didactic teaching

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

<b>University of Chicago, Department of Public Health Sciences</b>	2015-2017
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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, Organizational, and Volunteer Service

Medicaid MAX Working Group leader, University of Chicago	2015-2017t
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## Visiting Professorships, Seminars, and Extramural Invited Presentations

### Invited presentations

Use of low-value pediatric services among the commercially insured. University of Chicago Outcomes Research Workshop, Chicago, IL, 2017.

Prevalence and predictors of substitutable ED visits by children. Platform presentation, Pediatric Academic Societies 2016 Annual Meeting, Boston, MA, 2016.

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, 2013.

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, 2010.

## Publications

### Peer-Reviewed Publications

1. **Chua KP**, Chun MM. Implicit scene learning is viewpoint dependent. *Perception & Psychophysics*. 2003;65(1):72-80.
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.
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.
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.
5. **Chua KP**, Sommers BD. Changes in health and medical spending among young Adults under health reform. *JAMA*. 2014; 311(23):2437-2439.
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.

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.
  8. Tung EL, Baig AA, Laiteerapong N, Huang ES, **Chua KP**. Racial and ethnic disparities in diabetes screening between Asian Americans and other adults. *JGIM* 2016; doi: 10.1007/s11606-016-3913-x [Epub ahead of print]
  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.
  10. **Chua KP**, Conti RS. Out-of-pocket spending among commercially insured patients for epinephrine autoinjectors between 2007 and 2014. *JAMA Intern Med.* March 27, 2017 [Epub ahead of print], doi:10.1001/jamainternmed.2017.0252.
  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. *Medical Care.* 2017; 55(7):693-697.
- \*Co-primary author