BENJAMIN C. CHU

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RESEARCH INTERESTS

Health Economics, Public Health, Applied Econometrics

| 2016 – 2023 |
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| 2016 2010 |
| 2016 – 2019 |
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| 2010 – 2015 |
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JOB MARKET PAPER

Title: "Who Did the ACA Medicaid Expansion Impact? Using Linear Discriminant Analysis to Estimate the Probability of Being a Complier"

Abstract: What is the likelihood of being a complier in the ACA Medicaid expansion? Using linear discriminant analysis (LDA), I estimate how characteristics relating to socioeconomic status and race/ethnicity affect the likelihood that an individual will be a complier, defined as those induced by the expansion to obtain Medicaid coverage. Across multiple specifications, part-time and fulltime workers are more likely than non-workers to be compliers. Not only is this result more prominent for Black individuals, but they are also more likely to be compliers compared to other racial/ethnic groups. This paper not only serves to identify the types of individuals who were directly impacted by the expansion, but it also introduces a new approach that combines complier analysis with techniques from machine learning.

WORKS IN PROGRESS

- 1. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid"
- 2. Assessing the Effectiveness of Risk Adjustment Systems in Recognizing Dual Diagnosis and Co-occurring Conditions for Mental Health and Substance Use Disorders

POLICY PAPERS AND LEGISLATIVE REPORTS

- 1. University of Hawai'i at Mānoa. Hawai'i Opioid Initiative Evaluation Report 2021. Honolulu, HI. August 31st, 2021. Web Version: https://www.hawaii.edu/aging/phac/hoievaluation-report-21/
- 2. Abe, A., Chu, B., Fan, V.Y. State Opioid Response Technical Assistance Plan, 2021

- 3. Chu, B., Fontanilla, T., Fan, V.Y. University of Hawai'i at Mānoa. Overdose Data to Action Plan (OD2A) Laulima Outpatient Dataset Data Quality Assessment, 2021
- 4. **Chu, B.,** Fontanilla, T., Fan V.Y. University of Hawai'i at Mānoa. Overdose Data to Action Plan (OD2A) Laulima Inpatient Dataset Data Quality Assessment, 2021

DATA DASHBOARD CITATIONS

- 1. Talagi, D., DeCamp, J., Takahashi, D., Wong, K., Emory, C., Chu, B., Patil, U., Elliot, E., Katsutani, W., Fontanilla, T., Smith, T., Holmes, J., Curtis, A., Tseng, C. W., Fukada, N., Wood, B., Valera, J., Yurow, J., Aiona, A., Mesereau, E., & Fan, V.Y. (n.d.). Hawai'i Behavioral Health Dashboard: Healthcare Cost and Utilization Project: State Emergency Department Databases Mental Health Dashboard (Version No.). University of Hawai'i at Mānoa, Pacific Health Analytics Collaborative.
- 2. Talagi, D., DeCamp, J., Takahashi, D., Wong, K., Emory, C., Chu, B., Patil, U., Elliot, E., Katsutani, W., Fontanilla, T., Smith, T., Holmes, J., Curtis, A., Tseng, C. W., Fukada, N., Wood, B., Valera, J., Yurow, J., Aiona, A., Mesereau, E., & Fan, V.Y. (n.d.). Hawai'i Behavioral Health Dashboard: Healthcare Cost and Utilization Project: State Inpatient Databases Mental Health Dashboard (Version No.). University of Hawai'i at Mānoa, Pacific Health Analytics Collaborative.
- 3. Talagi, D., DeCamp, J., Takahashi, D., Wong, K., Emory, C., **Chu, B.**, Patil, U., Elliot, E., Katsutani, W., Tseng, C. W., Fukada, N., Wood, B., Valera, J., Yurow, J., Aiona, A., Mesereau, E., & Fan, V.Y. (n.d.). Hawai'i Behavioral Health Dashboard: Healthcare Cost and Utilization Project: State Emergency Department Databases Substance Use Dashboard (Version No.). University of Hawai'i at Mānoa, Pacific Health Analytics Collaborative.
- 4. Talagi, D., DeCamp, J., Takahashi, D., Wong, K., Emory, C., **Chu, B.**, Patil, U., Elliot, E., Katsutani, W., Tseng, C. W., Hermosura, A., Valera, J., Yurow, J., Aiona, A., Mesereau, E., & Fan, V.Y. (n.d.). Hawai'i Behavioral Health Dashboard: Healthcare Cost and Utilization Project: State Inpatient Databases Substance Use Dashboard (Version No.). University of Hawai'i at Mānoa, Pacific Health Analytics Collaborative.

PROFESSIONAL EXPERIENCE

University of Hawai'i at Mānoa, Center on Aging Graduate Research Assistant

Honolulu, HI 2019 - Present

- Performed data collection, data cleaning, data visualization, data analysis, and data quality assessment of administrative health insurance claims data using R and Python.
- Assisted in the preparation and crafting of evaluation reports for the Hawai'i Opioid Initiative.
- Collaborated with research analysts, data scientists, and junior faculty in the design, creation, and release of the Hawai'i Behavioral Dashboard.
- Mentored and supervised fellow colleagues in performing rapid lit reviews; preparing and rendering reports in LaTeX; and learning techniques in data collection, data cleaning, data visualization, and data inference in R and Stata.

University of Hawai'i at Mānoa, Department of Economics Lecturer

Honolulu, HI 2019 - Present

- Taught undergraduate courses in the subjects related to microeconomic theory, macroeconomic theory, and data analysis and visualization.
- Designed and constructed a learning curriculum that is easily accessible for students both in classrooms and online environments.
- Created and introduced a six-week intensive summer data analysis and visualization course for students pursuing quantitative economics.

Hawai'i Literacy Foundation *Intern*

Honolulu, HI Summer 2014

- Taught children from low-income housing communities in learning basic literacy skills in reading and writing.
- Designed and implemented lessons plans to be conducted in a K-5 classroom setting
- Assisted in the preparation and filing of grants for non-profit funding mechanisms

TEACHING

| University | y of Hawaiʻi at | Mānoa, De | nartment of l | Economics (| Instructor) |
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| 1. | ECON 130 Principles of Microeconomics | Spring 2019, Spring 2020, Fall 2022 |
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| 2. | ECON 131 Principles of Macroeconomics | Summer 2021 |
| 3. | ECON 256 Data Analysis and Visualization | Summer 2022 |
| 4. | ECON 300 Intermediate Macroeconomics | Summer 2019, Summer 2020 |

University of Hawai'i at Mānoa, Department of Economics (Teaching Assistant)

| 1. | ECON 130 Principles of Microeconomics | nics Fall 2016, Spring 2017, Fall 2018, | |
|----|---------------------------------------|---|--|
| | | Spring 2019 | |
| 2. | ECON 425 Introduction to Econometrics | Spring 2019 | |

AWARDS AND ACHIEVEMENTS

| TI THE STATE TELLIFICATION | |
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| Burnham Campbell Scholarship | 2022 |
| University of Hawai'i at Mānoa, Department of Economics | |
| Graduate Assistantship University of Hawai'i at Mānoa, Department of Economics | 2016 - 2019 |
| Frances Davis Graduate Student Teaching Nomination University of Hawai'i at Mānoa, Department of Economics | 2016 - 2019 |
| Phi Upsilon Omicron Officer | 2012 - 2015 |

University of Hawai'i at Mānoa, College of Tropical and Agricultural Resources

Golden Key Member 2012 - 2015

University of Hawai'i at Mānoa, College of Tropical and Agricultural Resources

University of Hawai'i at Manoa Band Scholarship

University of Hawai'i at Mānoa, Department of Music

PRESENTATIONS and CONFERENCES

2022

1. "Does Smoking Affect Wages?". Workshop on the Economics of Risky Behavior, Honolulu, Hawai'i, July 9th, 2022 (Discussant)

2021

- 1. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid". *University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, October 12th, 2021*
- 2. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid". *Hawai'i Economic Association Graduate Student Showcase, Honolulu, Hawai'i, November 4th, 2021*
- 3. "Who Did the ACA Medicaid Expansion Impact? Using Linear Discriminant Analysis to Estimate the Probability of Being a Complier". *University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, November 16th, 2021*

2020

1. "Autism Supports See Through My Eyes". *Special Parents Information Network Conference, Honolulu, Hawai'i, October 17th, 2021* (with Alysha Kim)

2019

- 1. "Are Children No Longer Unwelcome? New Insights on the Effects of the Affordable Care Act Expansion on Medicaid and Children's Health Insurance Program". *University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, March* 5th, 2019
- 2. "A Horse of Different Color: Strategies to Support Students with Autism Focusing on Motivation". Special Parents Information Network Conference, Honolulu, Hawai'i, April 13th, 2019 (with Ann N. Garfinkle)

2018

1. "Mindful Meditation and Communication Strategies". Special Parents Information Network, Honolulu, Hawai'i, April 21st, 2018

2017

1. Keynote Address. Special Parents Information Network, University of Hawai'i at Mānoa", *University of Hawai'i at Mānoa Applied Microeconomics Workshop, April 22st*, 2017

COMPUTER SKILLS

| Operating Systems | Microsoft Windows OS, Mac OS |
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| Programming Languages | R, Python, SQLite, HTML, MATLAB |
| Software Experience | Stata, RStudio, Microsoft PowerBI |
| Media/Design | LaTeX, Adobe Illustrator, Microsoft PowerPoint |

BACKGROUND

| Citizenship | USA |
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| Languages | English (Native), Japanese (Intermediate) |

REFERENCES

Prof. Timothy Halliday

Department of Economics University of Hawai'i Saunders Hall 533 2424 Maile Way Honolulu, HI 96822 USA 1-808-956-8615 halliday@hawaii.edu

Prof. Victoria Fan

Center on Aging University of Hawai'i Biomed C105 1960 East-West Road Honolulu, HI 96822 USA 1-808-956-5596 vfan@hawaii.edu

Prof. Sang Hyop Lee

Department of Economics University of Hawai'i Saunders Hall 512 2424 Maile Way Honolulu, HI 96822 USA 1-808-956-7041 leesang@hawaii.edu