# MARIA DIECI

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Division of Health Policy and Management UC Berkeley School of Public Health 2121 Berkeley Way, # 5302 Berkeley, CA 94720

#### **EDUCATION**

Ph.D. University of California, Berkeley

Health Policy (concentration in Health Economics), expected May 2022

Committee: William H. Dow (chair), Paul J. Gertler, Lia C.H. Fernald, Jonathan Kolstad

Economics: Health Economics, Development Economics

Global Health Policy: Maternal and Child Health, Quality of Care, Health Workforce

M.A. University of California, Berkeley, Economics (concurrent), 2019

Minor Fields: Development and Labor Economics

B.A. Harvard University, Social Studies, magna cum laude, 2013

Senior Thesis: "Rights within Reach: Implementing Maternal Health Care Rights for

Colombia's Displaced Women"

### **PUBLICATIONS**

- Dieci, Maria, Zachary Wagner, Willa Friedman, Sarah Burgess, Jessica Vandermark, Sandra I. McCoy, Manisha Shah, and William H. Dow. "Measuring Family Planning Provider Bias: A Discrete Choice Experiment among Burkinabé, Pakistani, and Tanzanian Providers." Studies in Family Planning 52, no. 3 (2021): 299-320. <a href="mailto:link">link</a>
- **Dieci, Maria**, Juan J. Llibre-Rodriguez, Daisy Acosta, and William H. Dow. "Cuba's cardiovascular risk factors: International comparison of levels and education gradients." *Plos one* 16, no. 3 (2021): e0247831. <u>link</u>
- Rosen, Daniel, Jessica Vernon, Rachel Silverman, Elizabeth Juma, **Maria Dieci**, and Prashant Yadav. "Malaria Case Management After the Affordable Medicines Facility for Malaria (AMFm): Availability, Quality, and Market Share for ACTs in Kenya's Private Pharmacies," Center for Global Development Working Paper Series 561 (2020). <u>link</u>

## **DISSERTATION**

Patient vs. provider incentives for malaria care in Kenyan pharmacies: A cluster randomized controlled trial

Malaria afflicts 190 million people in sub-Saharan Africa each year, with children, pregnant women, and the poor bearing the brunt of the burden. Nearly all deaths and serious illness are preventable through available, effective, and inexpensive medication. Despite this, most malaria cases are undiagnosed,

resulting in a gap between treatment and need: missed diagnoses result in avoidable illness, and overprescription of antimalarials can lead to drug resistance. Most malaria patients seek care at pharmacies, where I hypothesize that the mismatch between diagnosis and treatment reflects a misalignment of patient and provider incentives. In my dissertation, I investigate how realigning patient and provider incentives to diagnose suspected malaria cases prior to treatment can improve malaria case management. Building on prior work on the impact of subsidies for rapid diagnostic tests (RDTs) and malaria treatments, I test whether incentives targeted to pharmacists or patients will improve treatment targeting through increasing test result adherence. Using a cluster randomized trial design in 140 pharmacies in malaria-endemic zones in Kenya, I randomize patient discounts for testing & qualified first-line malaria treatment and pharmacist performance incentives and compare their effectiveness and cost-effectiveness to the status quo standard of care. Pharmacies were randomized to a status quo control group or one of three treatment groups using a digital malaria case management tool: (1) patient discounts for RDTs and first-line antimalarials conditional on a positive test; (2) pharmacy incentives for selling RDTs to diagnose fevers and for selling first-line antimalarials conditional on a positive test; and (3) patient discounts and pharmacy incentives for RDT use and first-line antimalarial use for confirmed malaria-positive cases. This design allowed us to evaluate the impact of two part incentive structures as well as to examine the causal effect of targeting that incentive to the patient (demand-side) or the provider (supply-side). Preliminary findings from ~80 sites suggest that subsidies and incentives for diagnostic testing increase usage of testing and may nudge malaria positive individuals to purchase high quality antimalarials and improve treatment targeting. Data collection is ongoing until early 2022, and analysis is in progress.

#### OTHER SELECTED WORK IN PROGRESS

- Impact evaluation of pharmacy-based incentives for long acting contraception on women's access to family planning in Kenya. Funding obtained, piloting in progress, with Paul Gertler.
- Impact of early life shocks on child health and cognition outcomes in Madagascar, focus on understanding changes in parental health investments
- Process evaluation of group-adaptation of early child development intervention in Madagascar. Data collection in progress, with Lia C.H. Fernald, Emanuela Galasso, Ann Weber, Caitlin Hemlock, and Lisy Ratsifandrihamanana.

#### PROFESSIONAL EXPERIENCE

RESEARCH 2015-2016 2013-2015	Senior Research Associate, Innovations for Poverty Action, Zambia Research Analyst for Prof. Dean Karlan (Yale), Innovations for Poverty Action
TEACHING 2018-2021	Teaching Assistant, Division of Health Policy and Management, UC Berkeley

Health Economics (undergraduate/graduate), Fall 2018, Fall 2019

Outstanding Graduate Student Instructor Award

Economic Evaluation and Population Health (graduate, online), Spring

2018, Spring 2019, Spring 2021

**SERVICE** 

2017 – 2021 Division of Health Policy and Management, UC Berkeley

Executive Committee (2018-2021)

Graduate Admissions Committee (Fall 2017, Fall 2018)

2020-2021 Berkeley Economists for Equity

Finance Officer

Diversity in Admissions Officer

REFEREEING Studies in Family Planning

### **CONFERENCE PRESENTATIONS**

2021	Center for Global Development and Maisha Meds "New Approaches to Improve
	Malaria Case Management in the Private Sector" convening, UC Berkeley Development
	Economics Lunch Seminar Series
2020	PAA Annual Meeting (cancelled due to COVID-19); Society for Research in Child
	Development; UC Berkeley Development Economics Lunch Seminar Series
2019	AHRQ Trainee Conference; Center for Effective Global Action (CEGA) Evidence to
	Action Conference; UC Berkeley Center on the Economics and Demography of Aging
	Workshop; PAA Annual Meeting
2018	Population Association of America (PAA) Annual Meeting; American Society of Health
	Economists (ASHEcon) Conference; International Health Economics Association
	(iHEA) World Congress
2017	Agency for Healthcare Research and Quality (AHRQ) Trainee Conference
2014	Latin American Social and Public Policy Conference

# **GRANTS, AWARDS AND FELLOWSHIPS**

- Co-Principal Investigator on Children's Investment Fund Foundation grant for project "Increasing access to contraceptive choice through targeted incentives: a cluster randomized controlled trial.", with Paul Gertler. (\$250,000 USD, 2021-2022)
- Co-Principal Investigator on United States Agency for International Development, Development Impact Ventures Stage II Award # 7200AA18FA00009 for project "A Digital Approach for Targeted Malaria Treatment", with Paul Gertler, Jonathan Kolstad and Jessica Vernon. (\$400,000 USD, 2019-2022)
- Co-Principal Investigator on Bill and Melinda Gates Foundation award for project "A Digital Approach for Targeted Malaria Treatment", with Paul Gertler, Jonathan Kolstad and Jessica Vernon. (\$320,392 USD, 2019-2022)
- UC Berkeley School of Public Health Alumni Association Award (2018-2021)
- Trainee on Agency for Healthcare and Research Quality (AHRQ) T-32 Fellowship (2018-2019)
- Trainee on National Institute of Child Health and Human Development (NICHD) T-32 Fellowship (2016-2018)

### **OTHER INFORMATION**

Languages English (native), Italian (native), Spanish (professional), French (proficient)

Programming Stata, R, Python, Open Data Kit, LaTeX, ArcGIS, SQL, Matlab