University of California
San Francisco

Assessing the Impact of Policy Incentives on California Dental Provider Participation in Medicaid

Eliza(Beth) Mertz, PhD, MA, Matthew Jura, PhD, MSc, Shuang Liang, MS, Aubri Kottek, MPH, Alfa-Ibrahim Yansane, AM, PhD, Bradley Munson, Marko Vujicic, PhD.

AcademyHealth Annual Research Meeting, June 27,2023

Progressive Policy Change in California

- Adult dental coverage in Medicaid is optional
- California provided full adult coverage for over 40 years
- Many policy changes have been enacted to improve Medi-Cal dental access and care since 2014

2009	2014	May 2014	Jan 2016	July 2015	Jul 2016	Jul 2017	Jan 2018	Jul 2018	May 2019	Sep 2019	May 2020	Jun 2021
Elimination of adult benefits (with phase out)	ACA expanded Medi-Cal	Partial adult benefits (AB82)	DTI initiated (focus on children)*	10% fee increase	HRSA OHSE grants	Prop 56 suppl. payments for specific CDT codes	Full adult benefits (SB97)	Prop 56 suppl. payments expanded	FY18-19 loan repay. award	HRSA OHI grants	FY19-20 loan repay. award	FY20-21 loan repay. award

State Auditor's Report

Little Hoover Commission #1

Little Hoover Commission #2

* Impact on service would vary by demonstration pilot sites, which also vary by domains and counties

ACA = Affordable Care Act; DTI = Dental Transformation Initiative; HRSA = Health Resources and Services Administration; OHSE = oral health service expansion; suppl. = supplemental; repay. = repayment; OHI = oral heath infrastructure; CDT = dental procedure codes

UCSF

Methods

Data Sources

- Data from come from Medicaid enrollment and claims files, provider state license and national provider identifier (NPI) data, ADA Masterfile and other data, as well as county-level neighborhood data from the American Community Survey (ACS).

Population studied

- Adults ages 21+ with Medicaid dental insurance in California from 2014-2019.

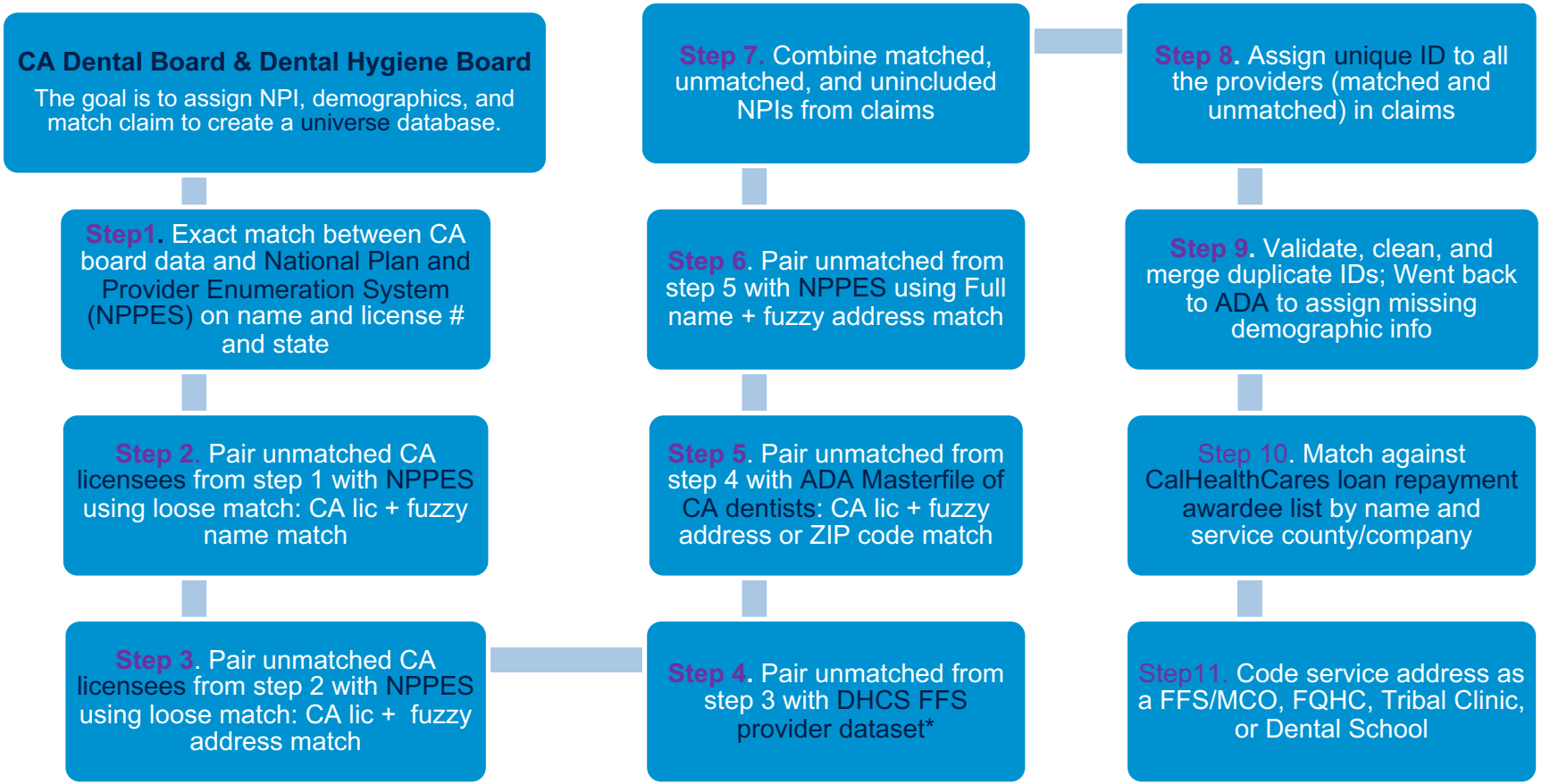
Statistical methods

- Multilevel logistic regressions considering multiple observations per unit of analysis, utilizing generalized estimating equations and interrupted time series parametrization modeled the policies' effect on provider participation. We modeled three binary outcomes:

  1) any dental claim each year,

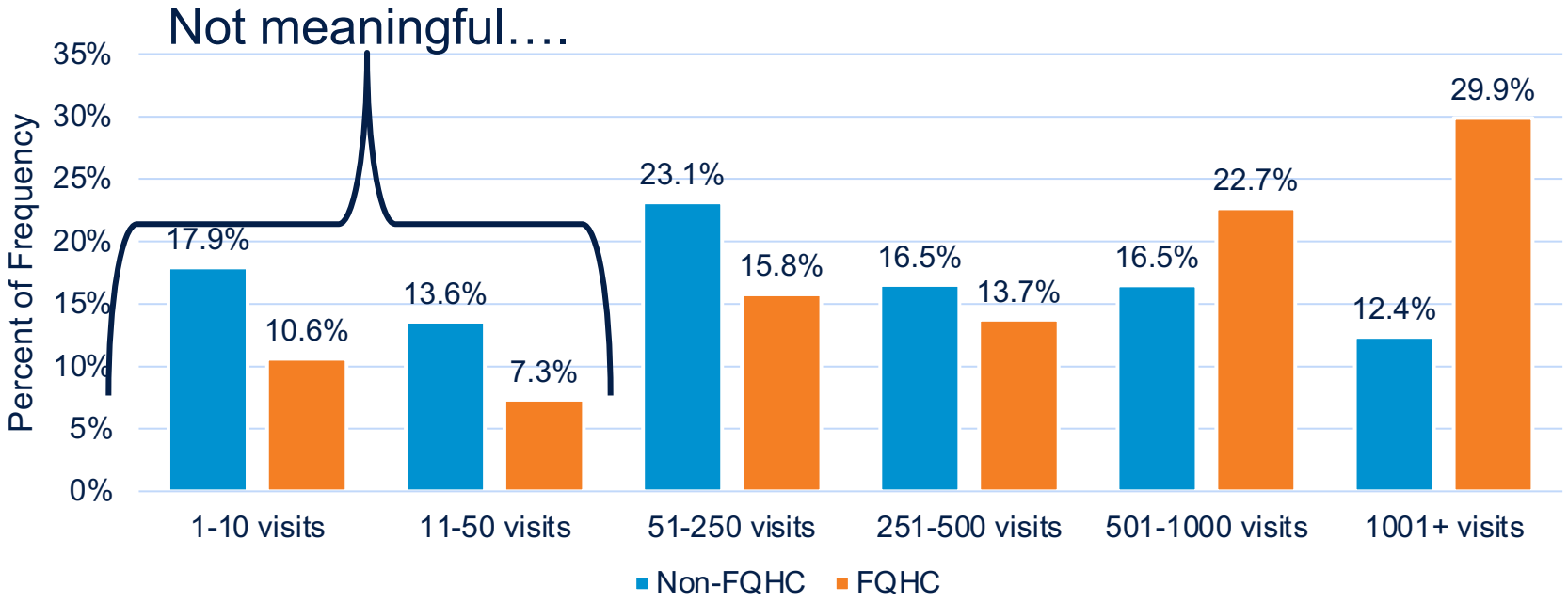
  2) claims for at least 100 adult Medicaid patients each year, and

  3) at least 1 dental claim at a safety net clinic (SNC) each year.


CA Dental Board & Dental Hygiene Board
The goal is to assign NPI, demographics, and match claim to create a universe database.
Step1. Exact match between CA board data and National Plan and Provider Enumeration System (NPPES) on name and license # and state
Step 2. Pair unmatched CA licensees from step 1 with NPPES using loose match: CA lic + fuzzy name match
Step 3. Pair unmatched CA licensees from step 2 with NPPES using loose match: CA lic + fuzzy address match
Step 4. Pair unmatched from step 3 with DHCS FFS provider dataset*
Step 5. Pair unmatched from step 4 with ADA Masterfile of CA dentists: CA lic + fuzzy address or ZIP code match
Step 6. Pair unmatched from step 5 with NPPES using Full name + fuzzy address match
Step 7. Combine matched, unmatched, and unincluded NPIs from claims
Step 8. Assign unique ID to all the providers (matched and unmatched) in claims
Step 9. Validate, clean, and merge duplicate IDs; Went back to ADA to assign missing demographic info
Step 10. Match against CalHealthCares loan repayment awardee list by name and service county/company
Step11. Code service address as a FFS/MCO, FQHC, Tribal Clinic, or Dental School

Extent of provider participation

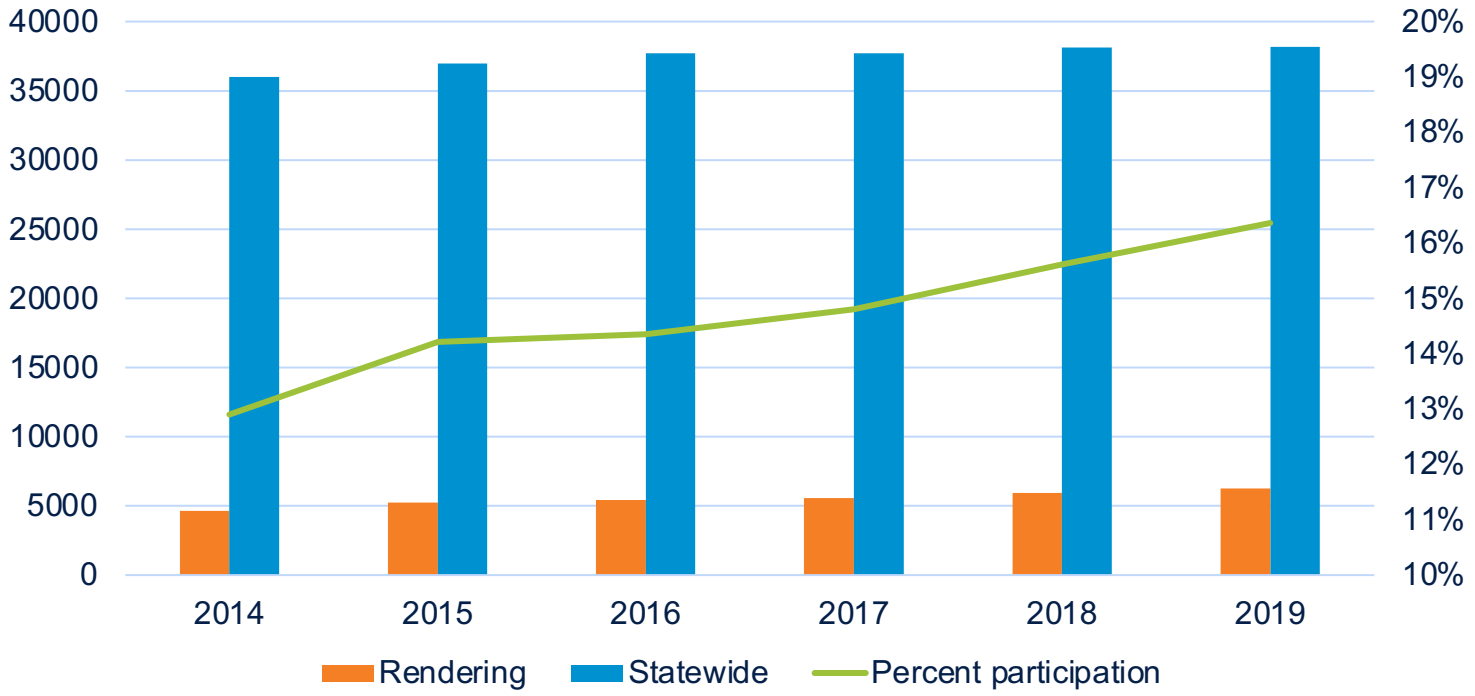
Distribution of adult visits per rendering provider, 2019



UCSF

Dental Providers

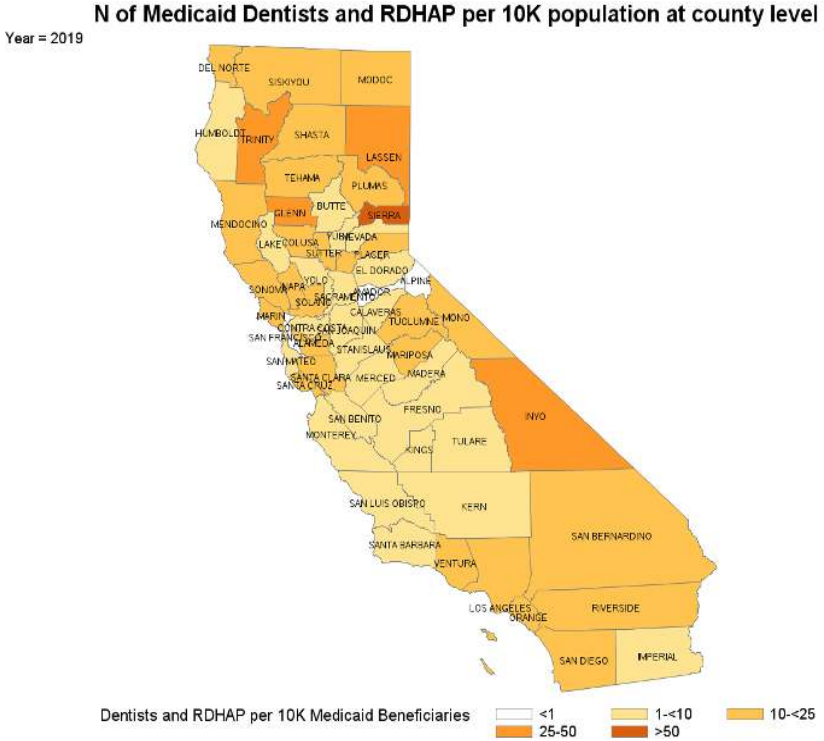
Rendering **>100 patient visits*** vs. all active licensees in California**



*Rendering providers are dentists (general and specialist) and RDHAPs with adult claims in each year.
**Statewide providers include all active dentist and RDHAP licensees in California, and any additional rendering providers from the claims data.

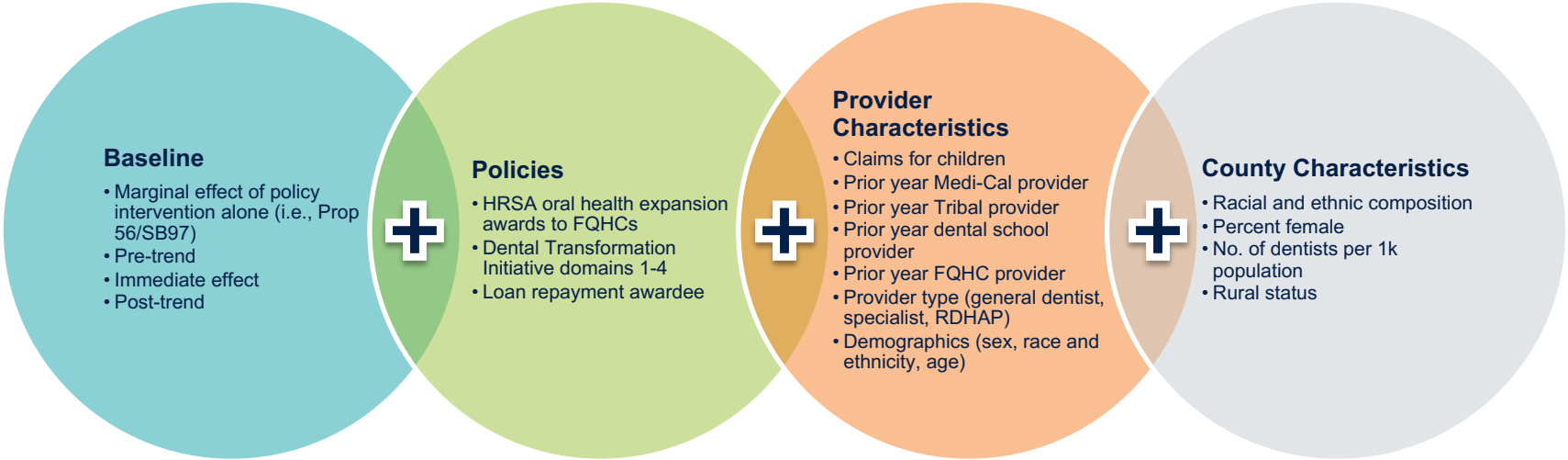
UCSF

Provider distribution by county



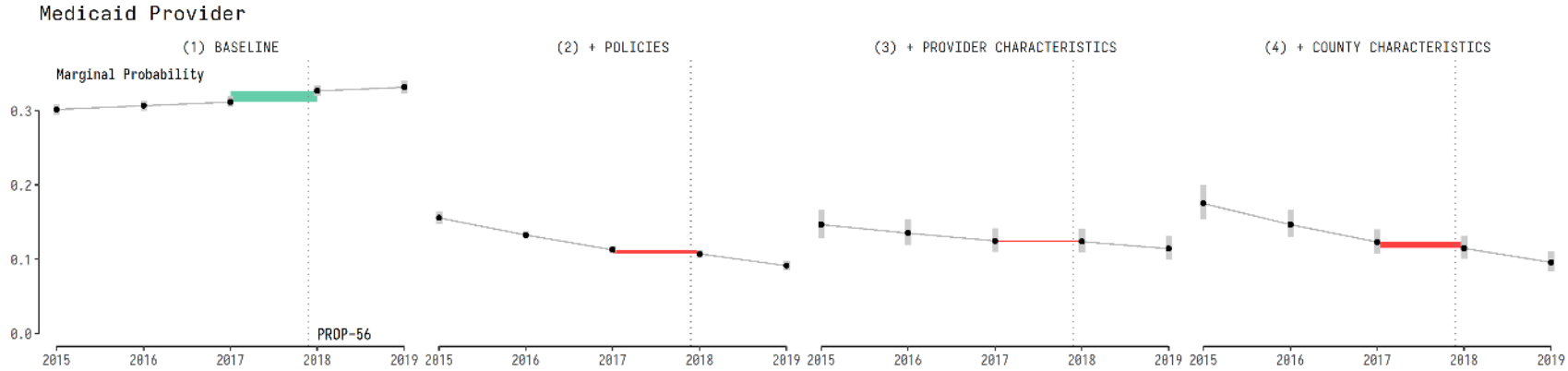
Multilevel regression models

List of covariates included in layered provider models



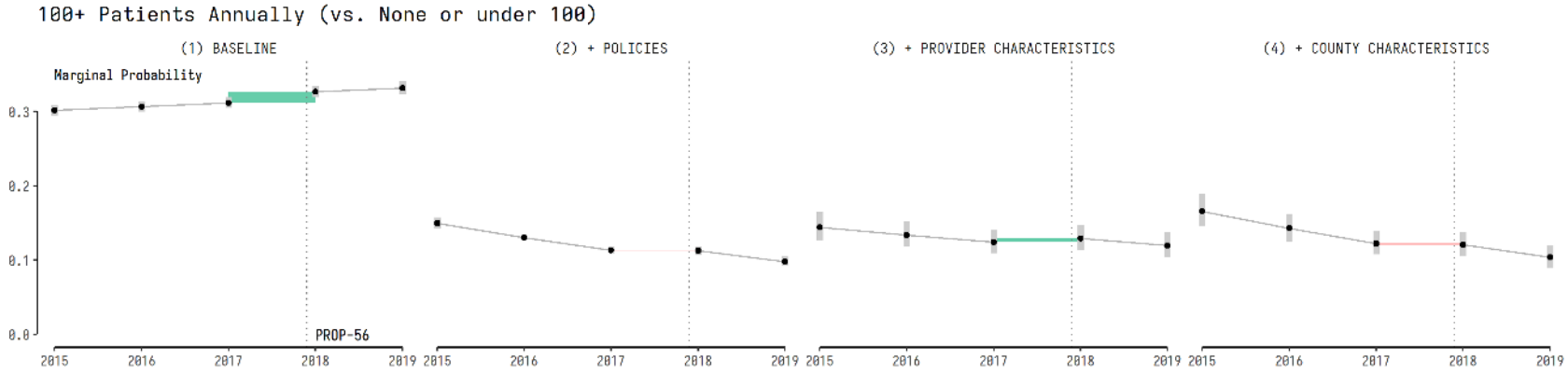
Medicaid provider

Among universe of providers, factors predictive of any FFS/DMCO claims



Extent of provider participation

Among universe of providers, factors predictive of 100+ patients annually (non-FQHC)

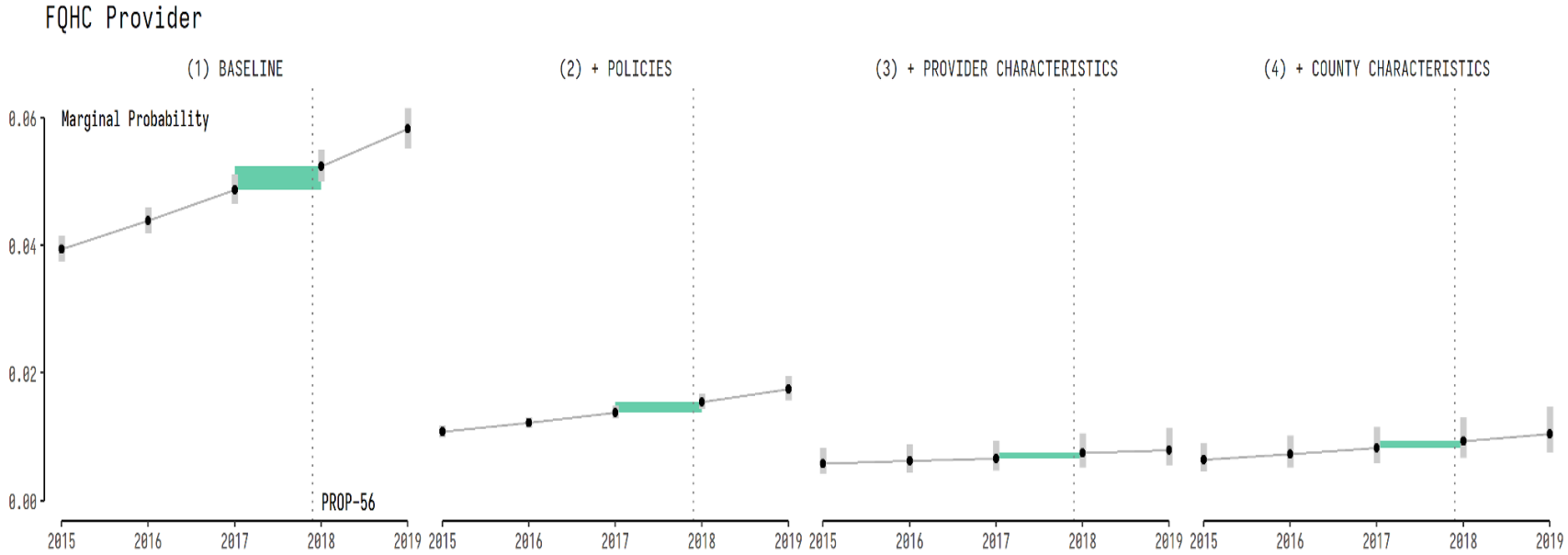


Provider Participation in Medi-Cal Dental

- The predictive positive factors of being an enrolled provider (1+ claim) are prior-year Medicaid enrollment, being an RDHAP (vs. general dentist), and non-white provider race.
- The predictive negative factors include practice rural status, older and younger dentists (vs. 50-64), and being a specialist dentist (vs. general dentist).
- Predictors for dental providers to serve 100+ patients were similar: prior-year Medicaid enrollment, being an RDHAP (vs. general dentist), non-white provider race, along with larger county dentist per population ratio and other policy factors.
- The negative predictive factors were also similar: county rural status, dentist age and specialist status, as well as certain policy factors.

Medicaid provider- Safety Net

Among universe of providers, factors predictive of any FQHC claims



Safety Net Provider Enrollment

- The most predictive positive factors of working in SNCs were prior-year Medicaid enrollment, Black and Hispanic dentists (vs. white), younger dentists, county rural status, and several other policy factors, including capacity-building grants and loan repayment awardees.
- The negative predictive factors include being a specialist dentist (vs. general dentist), male gender (vs. female), and other policy factors.

Conclusion

- In California's Medi-Cal program, FFS enhancements along with full reinstatement of dental benefits has provided minimal incentive for provider enrollment and limited benefit for adult patients' access to care.
- Loan repayment provides larger per person return for provider enrollment, but this was only provided for 37 dentists (in 2018-2019) in a state of over 39 million people, of which almost 14 million are enrolled in Medicaid.
- Although dwarfed by the FFS environment, federal investments provide sustained improvements in access in SNCs.

- Funding: WestHealth Policy Center

Questions?