HCAI Research Data Center Dashboard Overview

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RDC Overview

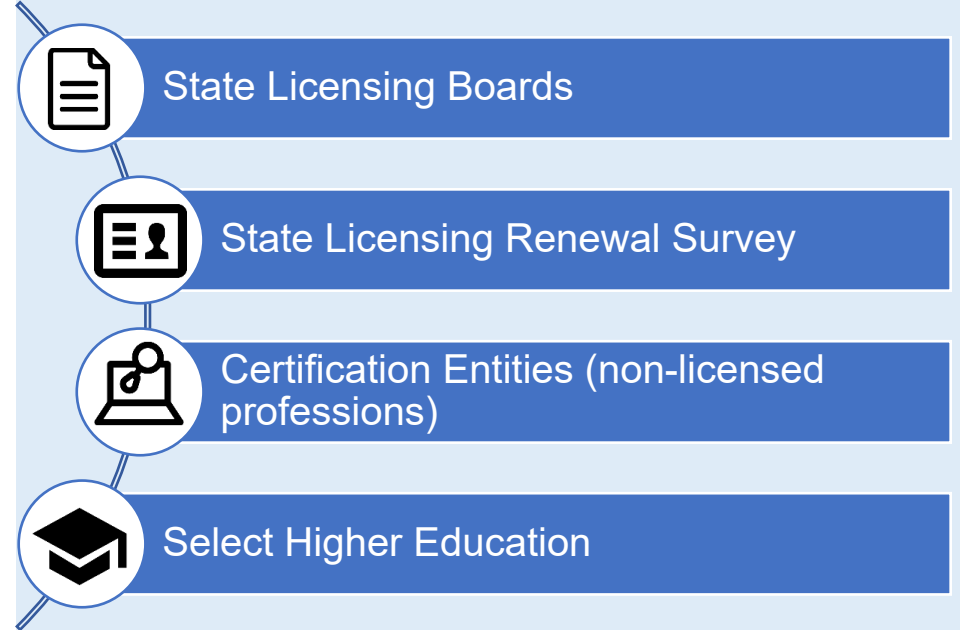Assembly Bill 133 created the Health Workforce Research Data Center

Overall Purpose:

Serve as central source of health care workforce and education data

Provide better and timelier data and analysis to inform state policy regarding issues of workforce shortage, equity, and distribution.

Health and Safety Code §128051 Directs HCAI to collect the following data:

- Supply
- Geographical Distribution
- Diversity
- Demand
- Educational Capacity

State Licensing Boards

State Licensing Renewal Survey

Certification Entities (non-licensed professions)
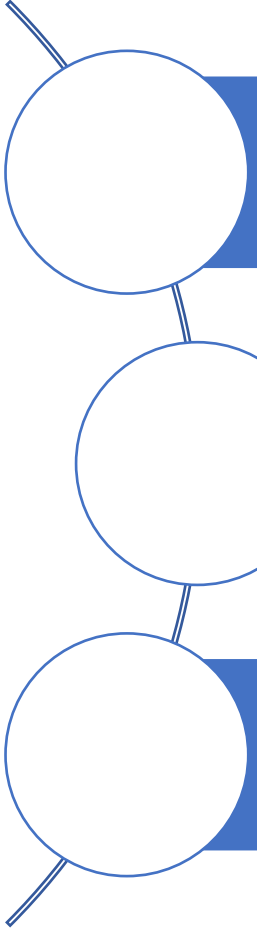
Select Higher Education

HCAI Survey Response Rates

- Upper 80s to mid 90s for most questions.
- Cell Based Weighting will be used to statistically adjust responses until the percent of the workforce surveyed is closer to 100%
- Report *percentages* in our dashboards rather than *counts*. Weighted percentages should remain stable even as counts increase over time

- Dashboard Data Response Rates for Active In-State Registered Pharmacist & Advanced Practice Pharmacist Licenses as of 01/03/2023

Question	Total Surveys	Decline to State	Not Asked/NA	Response Rate
1. Ethnicity	17,959	1,153	0	93.6%
2. Race	17,959	1,432	0	92.0%
3. Initial EDU	17,959	500	0	97.2%
5. Highest EDU	17,959	475	0	97.4%
15. Language(s) Spoken	17,959	962	0	94.6%
16. Sex at Birth	17,959	1,322	0	92.6%
17. Gender Identity	17,959	1,360	0	92.4%
18. Sexual Orientation	17,959	2,639	0	85.3%
19. Disability Status	17,959	2,306	0	87.2%

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Cell Based Weighting

Statistically adjust responses to account for differences between the respondents (sample) and the complete universe of active licenses (population) for each response group

Weights are re-calculated each month for each question based on latest set of license and survey data

Decline to State, Not Asked or Skipped answers are excluded

Percent Surveyed and Submission Rates

- Because of renewal cycle, will take roughly 2 years to reach near 100% surveyed
- Will never fully reach 100% because of paper renewals and new licenses

- Dashboard Data Response Rates for Active In-State Registered Pharmacist & Advanced Practice Pharmacist Licenses as of 01/03/2023

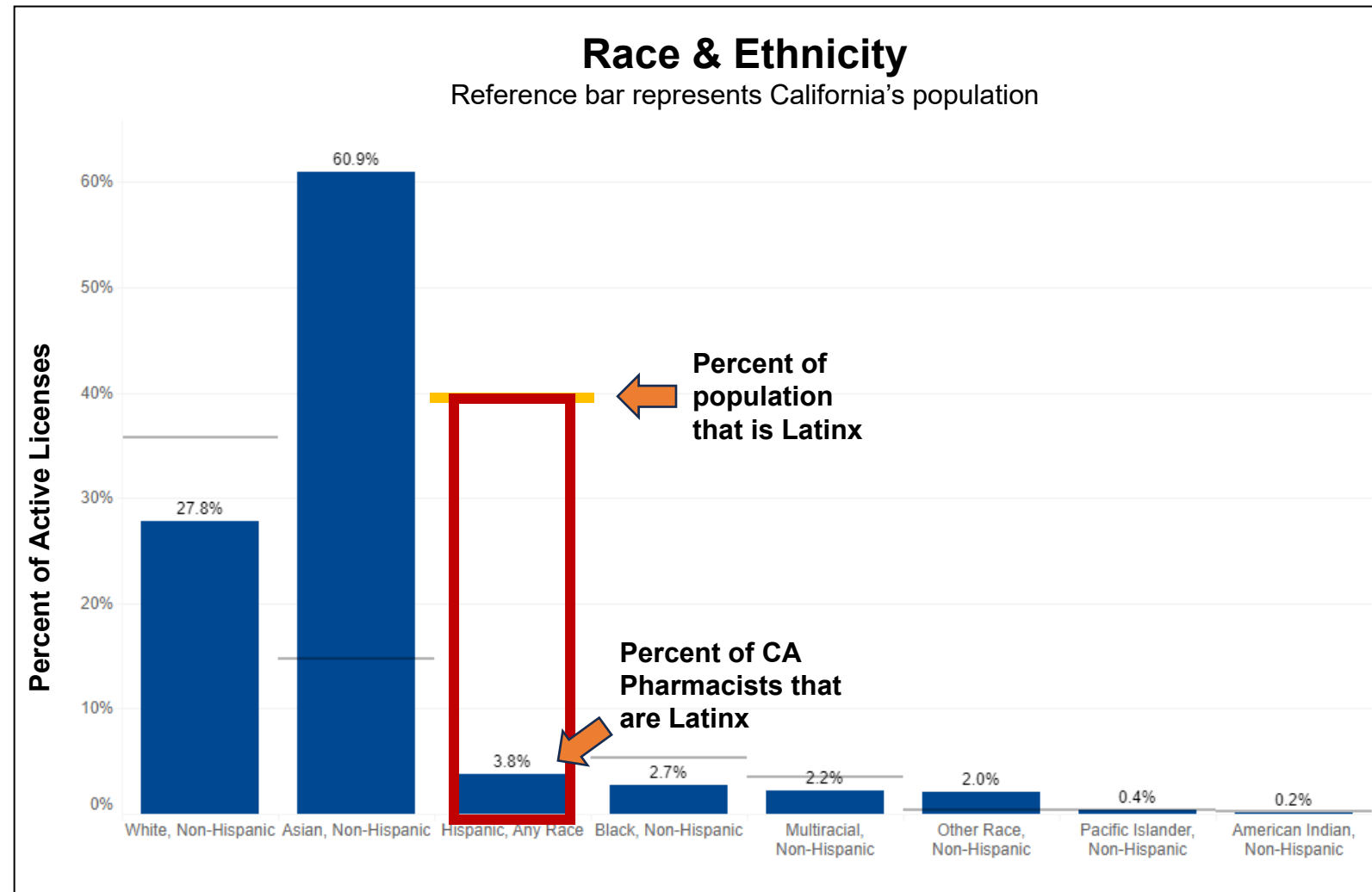| License Name	Active Licenses	Total Surveys	Percent Surveyed
Advanced Practice Pharmacist	1,159	575	49.6%
Registered Pharmacist	40,660	17,384	42.8%
Grand Total	41,819	17,959	42.9%

Challenges and Opportunities

- Encourage online renewals over paper renewals
  - Paper renewals collect no survey data

- Increase response rates (reduce Decline to States)
  - Particularly NPI & Practice Address(es)

- Consider collection of data at time of application, not just at time of renewal

Race & Ethnicity of California's Health Workforce

- Updated to include 47 different professions and regional level breakdowns

    - Can filter by Workforce Category, License Name, and Region

- Expanded trends over time to the last 30 years

- Key Questions

    - What is the current diversity of health workforce professionals?

    - How do they compare to the CA population?

    - How has diversity changed over time?
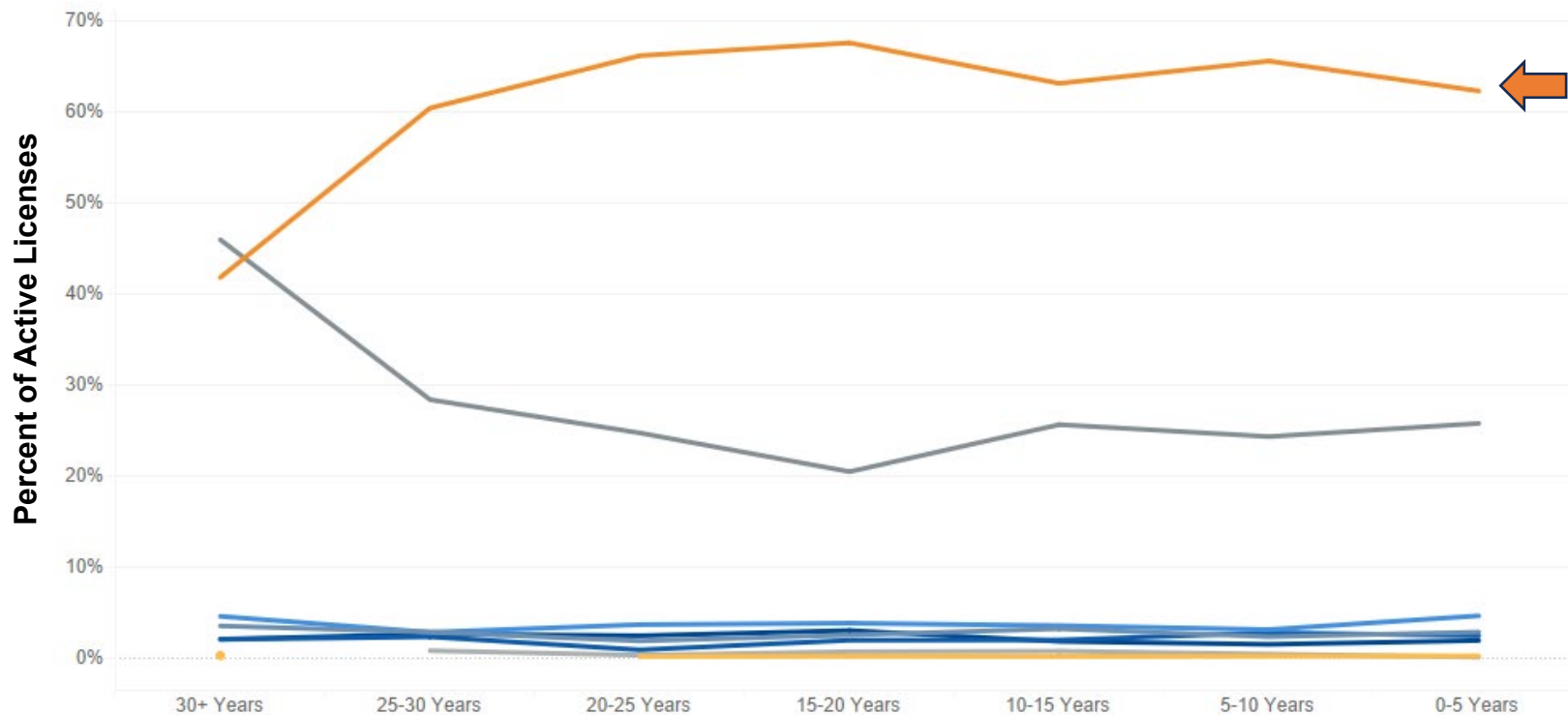
- Data will be refreshed annually

- The Latinx population is the most underrepresented group in the health workforce

- While the population of Latinx in California is 40%, the RPH & APH workforce is only 3.8%

- Latinx is also underrepresented in all six workforce categories and all nine geographic regions that HCAI examines
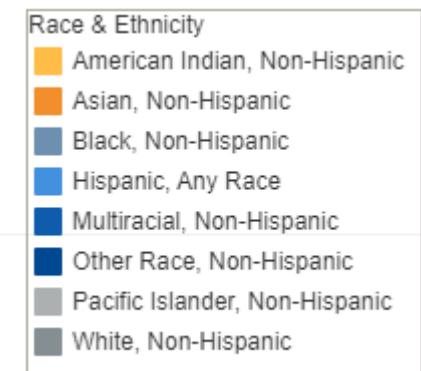
Race & Ethnicity
Reference bar represents California's population

Percent of Active Licenses

- White, Non-Hispanic: 27.8%
- Asian, Non-Hispanic: 60.9%
- Hispanic, Any Race: 3.8%
- Black, Non-Hispanic: 2.7%
- Multiracial, Non-Hispanic: 2.2%
- Other Race, Non-Hispanic: 2.0%
- Pacific Islander, Non-Hispanic: 0.4%
- American Indian, Non-Hispanic: 0.2%

Percent of population that is Latinx

Percent of CA Pharmacists that are Latinx

Race & Ethnicity over Time

- Over the last 20 years, Asian, Non-Hispanics have made up more than 60% of the Actively licensed Registered Pharmacists & Advanced Practice Pharmacists by license issue date
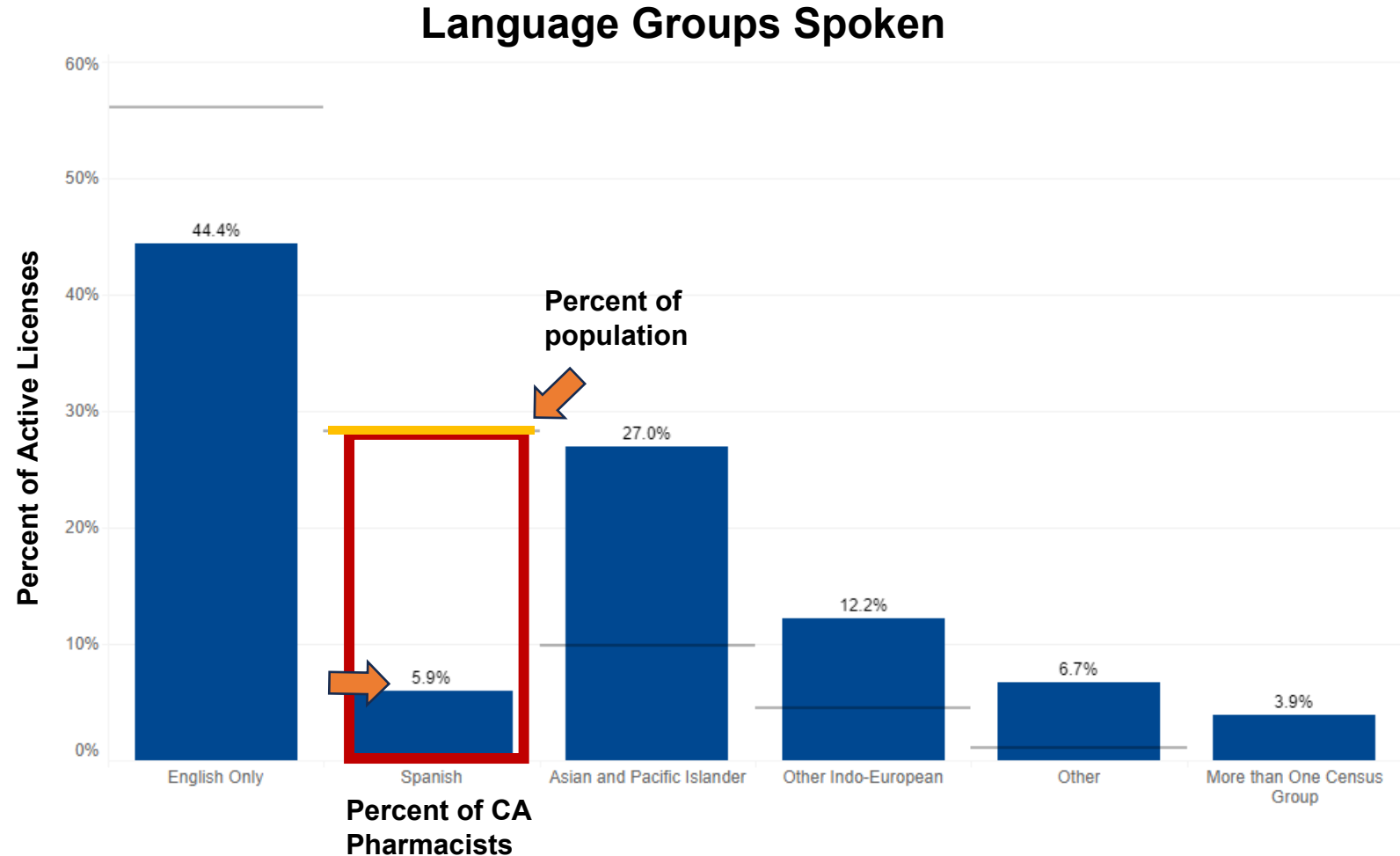
Race & Ethnicity
- American Indian, Non-Hispanic
- Asian, Non-Hispanic
- Black, Non-Hispanic
- Hispanic, Any Race
- Multiracial, Non-Hispanic
- Other Race, Non-Hispanic
- Pacific Islander, Non-Hispanic
- White, Non-Hispanic

Languages Spoken by CA's Health Workforce

- Includes 47 different professions and regional level breakdowns

  - Can filter by Workforce Category, License Name, and Region

- Trends over time for the last 30 years

- Key Questions

  - What languages are spoken by the health workforce?

  - How do they compare to the CA population?

  - How has language diversity changed over time?

Languages Spoken by CA's Health Workforce

- Spanish is the most underrepresented language in the health workforce and is underrepresented in all six workforce categories and all nine regions in CA

Language Groups Spoken

CA's Health Workforce Education Pathways

- Includes 43 different professions, by Region, Race & Ethnicity, Assigned Sex at Birth, and School Location

  - Can filter by Workforce Category, License Name, and Region

  - Does not include Dentists, Doctors of Podiatric Medicine, Osteopathic Physician and Surgeons, and Physician and Surgeons

- Trends over time for the last 30 years

- Key Questions

  - What are the pathways to licensure for the health workforce?

  - Is the pathway different for people from underrepresented groups?

  - How have the pathways changed over time?

CA's Health Workforce Education Pathways

Highest Education Levels

Females — Doctoral Degree 87.7%, Bachelor's Degree 10.7%, Master's Degree 1.6%

Males — Doctoral Degree 82.8%, Bachelor's Degree 14.5%, Master's Degree 2.7%, Associate's Degree 0.0%
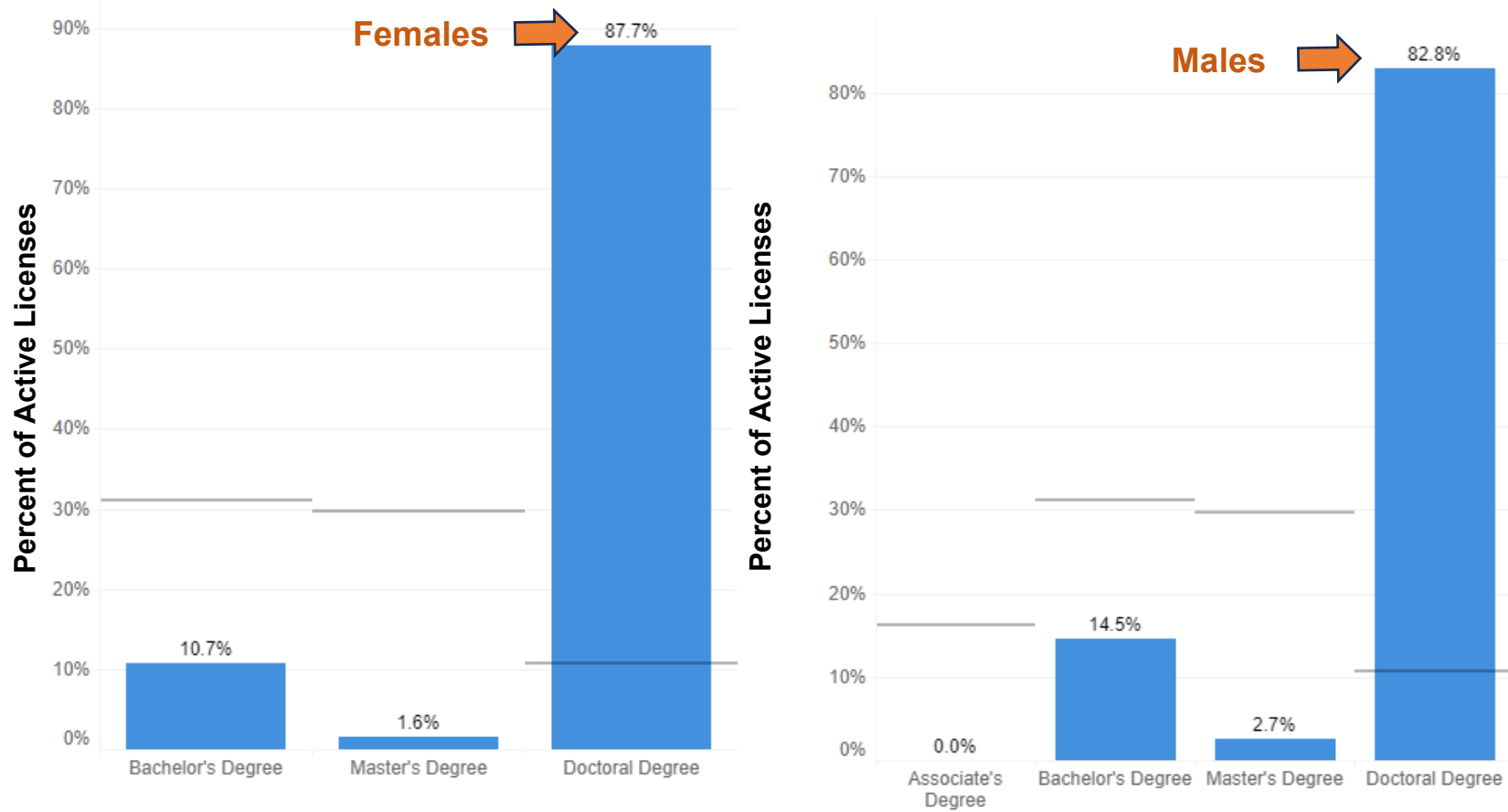
- More female pharmacists receive a Doctoral degree than male pharmacists (sex assigned at birth)

Future Work

- Workplace settings

- Detailed race and ethnicity metrics

- Sexual Orientation and Gender Identify Metrics

  - Data De-Identification Guidelines result in broader geography breakdowns

- Medi-Cal threshold languages

- Supply/Demand

  - Backfilling missing HCAI data with DCA data for modeling

- Continuous Improvement on DCA/Survey data

Custom Data Request - Pharmacy Deserts

- Where are they?

- How are they best defined?

  - Population based, Geography based, Drive-Time based, Mix of all three

- Who is impacted most by them?

  - Age Range(s), Urban/Rural, Race & Ethnicity, Federal Poverty Level, etc.

- Can we watch deserts grow/change over time?

  - Planning to re-analyze in 6 months

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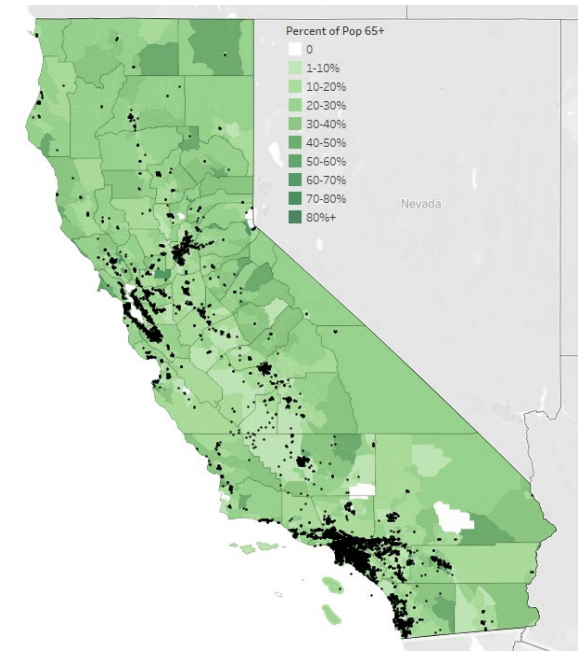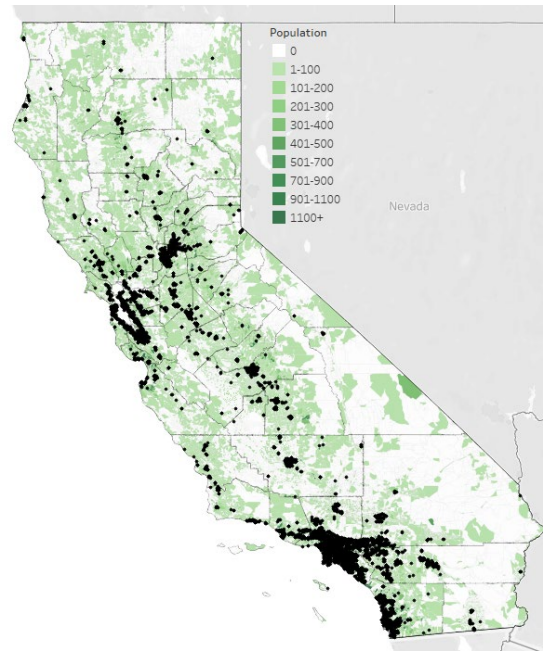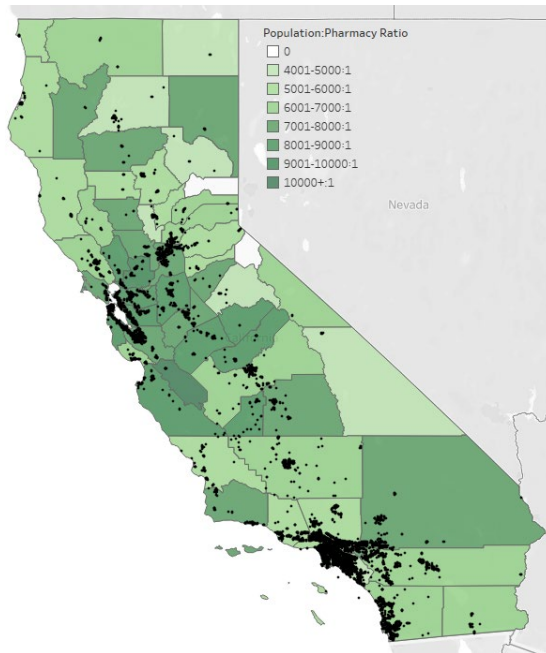Department of Health Care
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Geography Based

- Number of pharmacies per area

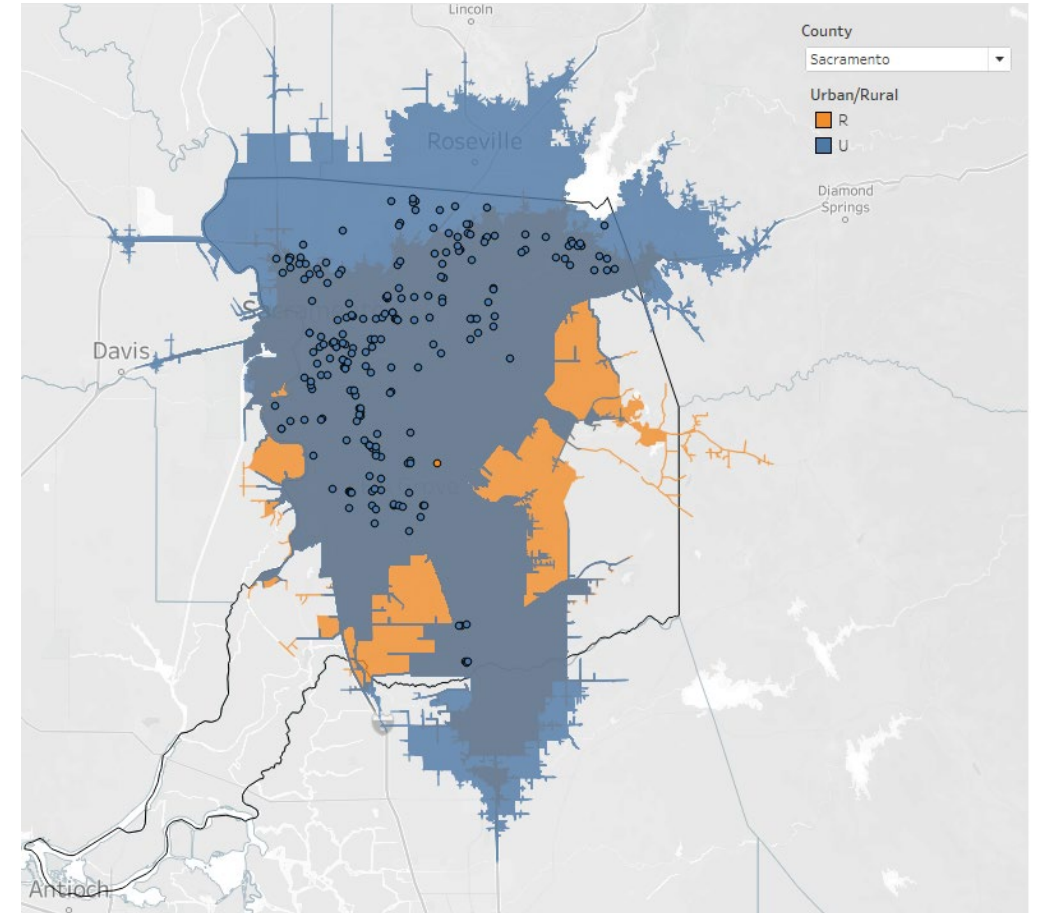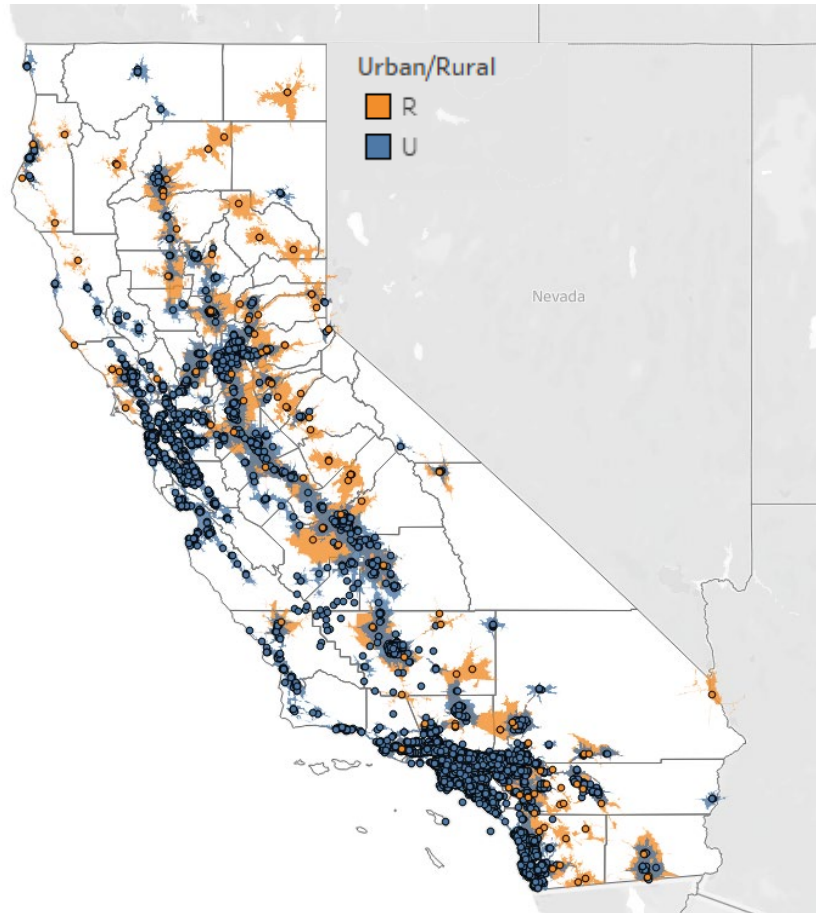- Urban vs Rural pharmacies
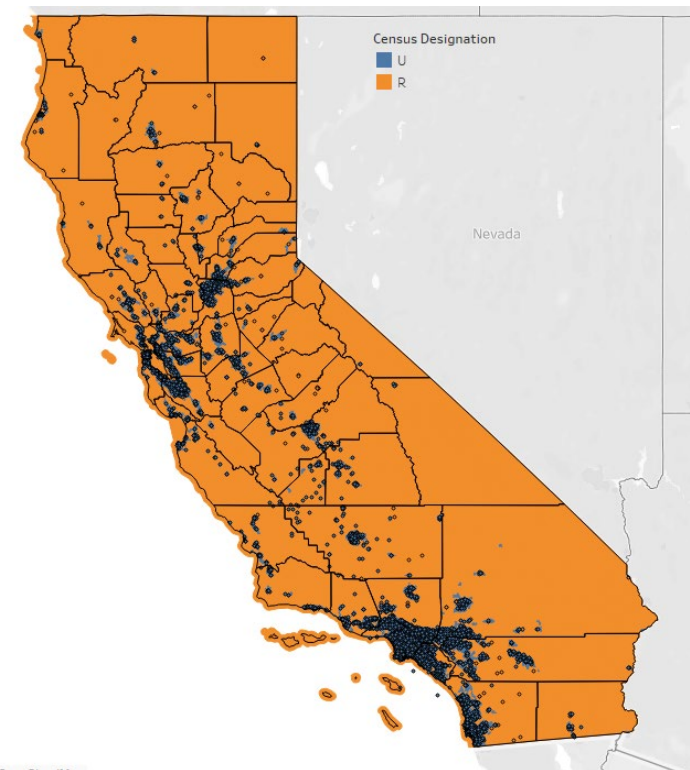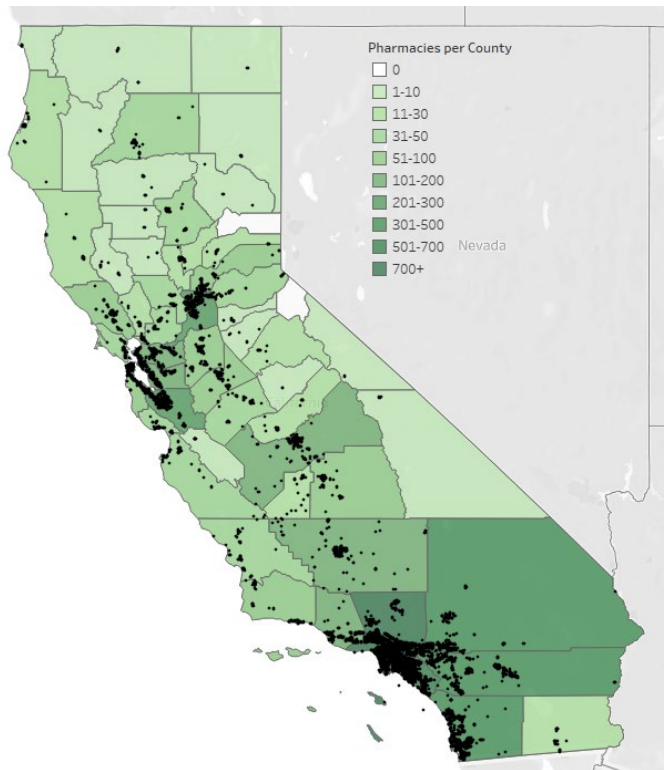
Population Based

- Population to Pharmacy Ratios

- Population density

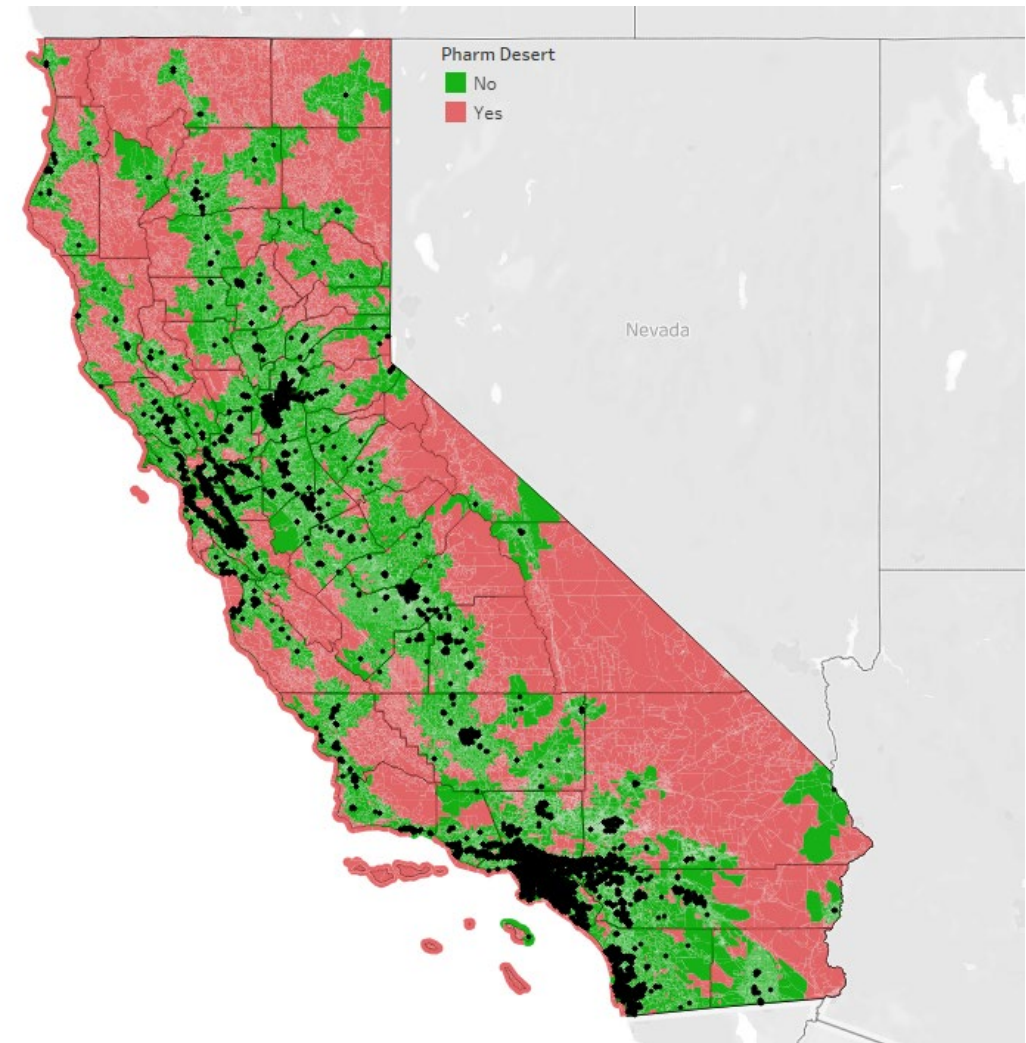- Percent of Population by Age Range(s)

Drive Time Based

- Urban Pharms = 15 minutes, Rural Pharms = 30 minutes

Combination of all three

- Desert = Areas/Populations *not* reached by drive time polygons.

- Demographics of Deserts?

  - Population counts

  - Age Range(s)

  - Race & Ethnicity breakdowns

  - Poverty Levels

- Increasing or decreasing over time?

Questions/Comments

- Email the HCAI Health Workforce Data team at: **workforcedata@hcai.ca.gov**

- You can also visit our website for more on:
  - Health Workforce Datasets
  - Health Workforce Dashboards
  - Health Workforce Licensure Data & Renewal Survey FAQs
  - Annual Reports to the Legislature

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