Agenda Item V: Draft Recommendations on HPD and Public Health Data

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For Today

- Relevant statutory language
- What is public health?
- Public health data and HPD
- HCAI engagement with public health data
- Examples: use cases for HPD data and public health purposes
- Input from public health stakeholders
- Draft recommendations
- Discussion and next steps

Relevant Statutory Language

HSC 127672.(a)(8) On or before July 1, 2024, the advisory committee shall make recommendations to the office on how existing state public health data functions may be integrated into the system. The advisory committee shall also recommend options for state public health data integration. These recommendations shall be published on the office's internet website.

HSC 127672.8 The office shall ensure that the system can map to other datasets, including public health datasets on morbidity and mortality, and data regarding the social determinants of health.

What is Public Health?

- Public health professionals work to improve the health of families and communities by promoting healthy lifestyles, preventing disease, and removing environmental dangers.
- The California Department of Public Health (CDPH), in collaboration with county public health officers, oversees a variety of research, response and prevention programs.

Source: California Department of Public Health

- **Preventing the spread of diseases** like COVID-19, Ebola, flu, mpox and Zika by monitoring and tracking epidemics.
- **Certifying and licensing various health facilities and professionals** to ensure individual and community safety.
- **Collecting and using data, technology and innovation to eliminate poor health outcomes** that impact our most vulnerable populations.
- **Processing vital records** such as birth, marriage and death certificates.
- **Educating families on the proper use of seatbelts, helmets and child seats**.
- **Planning the State's response to disasters** such as major floods and earthquakes.
- **Monitoring food borne illness outbreaks**.
- **Promoting healthy lifestyles** through nutrition and obesity prevention, health screenings for new moms and babies, nutrition programs like Women Infants and Children (WIC) and Supplemental Nutrition Assistance Program (SNAP)

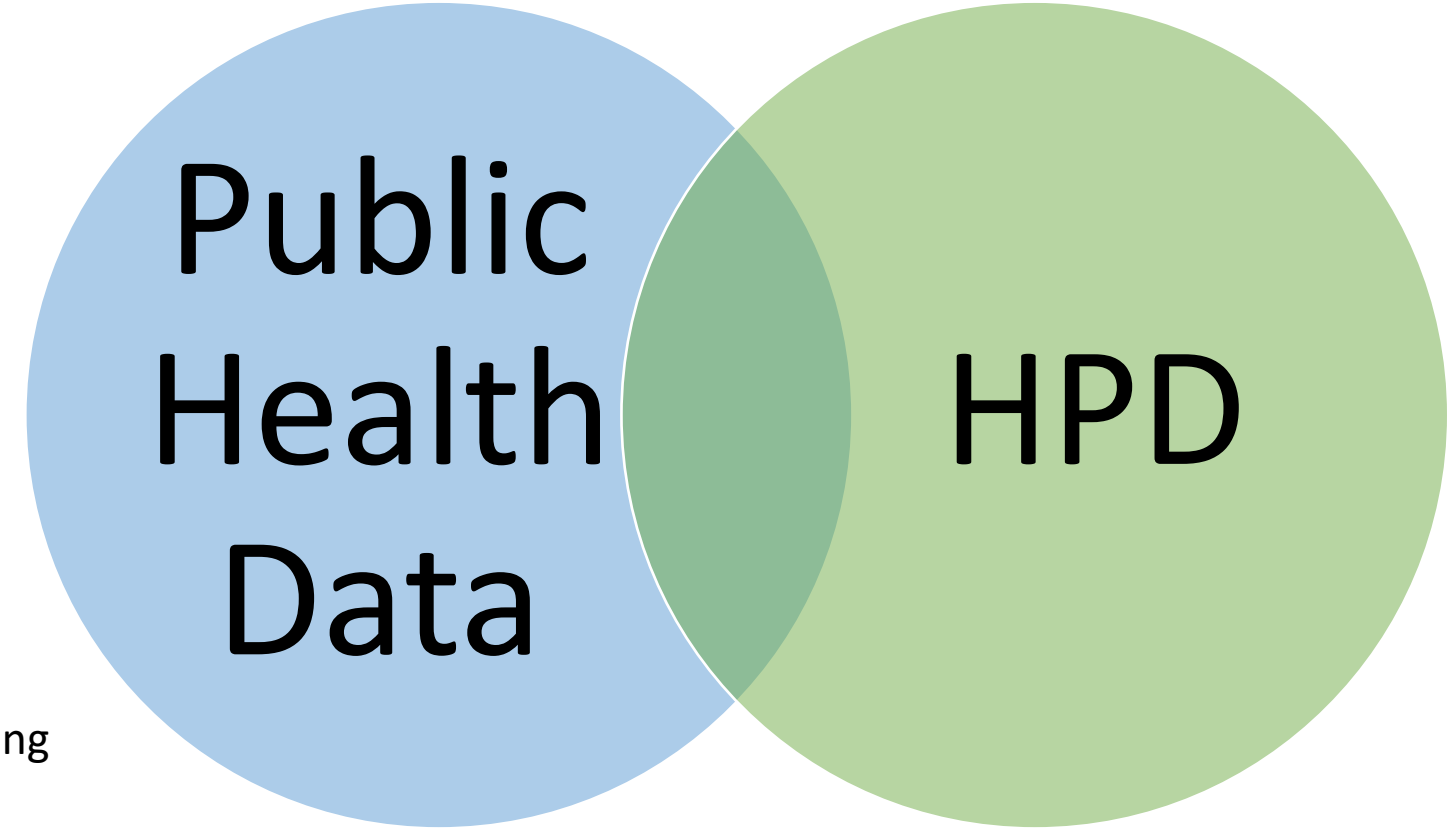
Complementary Data Assets

Many data streams on broad range of topics, including:

- Disease registries
- Environmental data
- Vital statistics
- Social drivers of health
- Community conditions

Major areas of focus:

- Disease surveillance, outbreaks in near real time
- Assessing and addressing disease burden and disparities
- Evaluation



Covered medical and pharmacy services:

- Utilization data
- Payment data, including out of pocket obligation
- Master patient index

Major areas of focus:

- Retrospective analysis
- Assessing cost and cost drivers
- Multi-payer and cross-payer analysis
- Longitudinal analysis

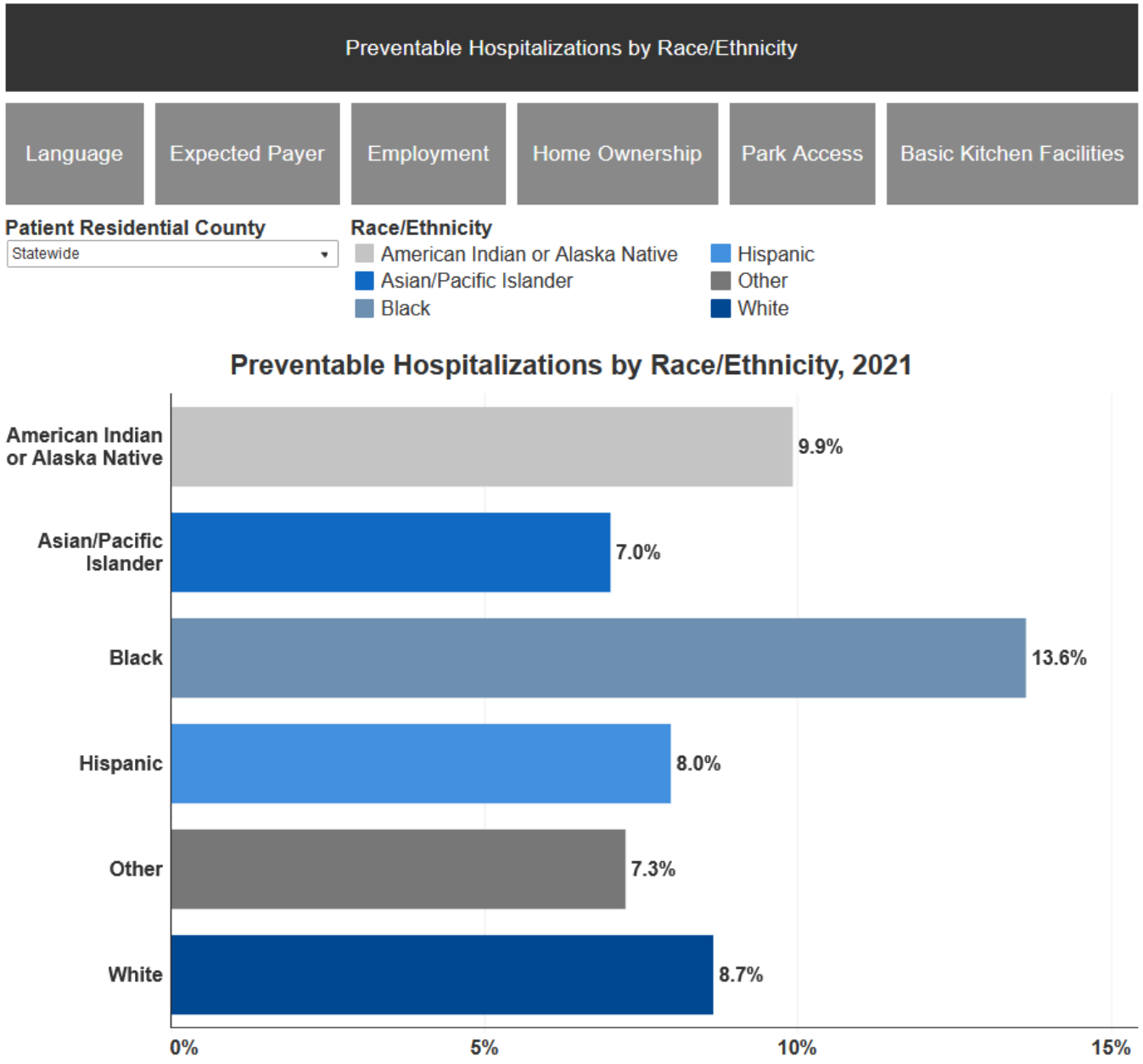
HCAI Actively Engages with Public Health Data

- HCAI's public reporting portfolio includes visualizations aligned with public health priorities and goals
  - Social Drivers of Health and Preventable Hospitalization Rates
- CDPH and HCAI have a track record of collaboration on data for public reporting
- HCAI provides data for multiple CDPH purposes, including:
  - Maternal Health Conditions at Delivery
  - Let's Get Healthy California
  - California Overdose Surveillance Dashboard

Opportunity to incorporate HPD into existing public health efforts – both internally at HCAI and in collaboration with CDPH and other public health stakeholders.

Social Drivers of Health and Preventable Hospitalization Rates

- In 2021, 13.6% of Black Californians' hospital stays were potentially preventable.
- That rate is higher than any other racial/ethnic group's and nearly twice as high as for Asian/Pacific Islander patients (7.0%).
- Preventable hospitalizations diagnoses include asthma, hypertension, and diabetes with lower-extremity amputation; they correspond with AHRQ Prevention Quality Indicators.
- Employment, Home Ownership, Park Access, and Kitchen Facilities data comes from the Healthy Places Index.



Source: Social Drivers of Health (SDoH) and Preventable Hospitalization Rates, released November 2023.

Maternal Health Conditions at Delivery

Welcome to the California maternal health conditions dashboard based on state- and county-level delivery hospitalization data for 2008–2021. Here you can see data at a glance, obtain more details for indicator subcategories, as well as download data for your own analyses.

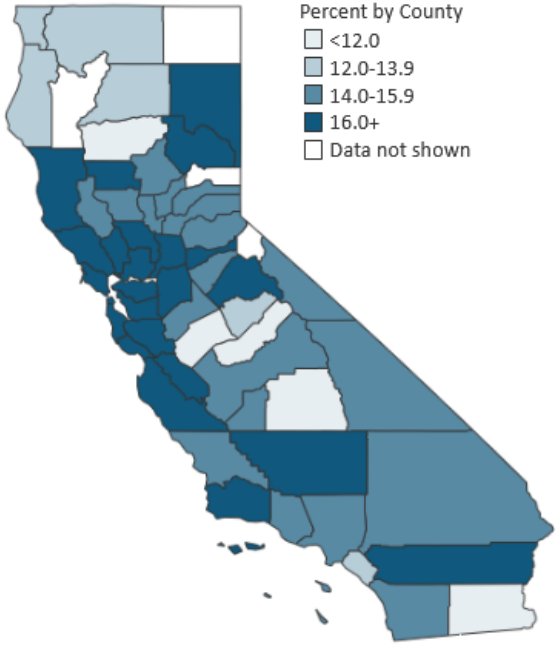
Dashboard Instructions (PDF) | About the Data (PDF) | Download Data (CSV, 9.96MB)

State Dashboard | County Dashboard

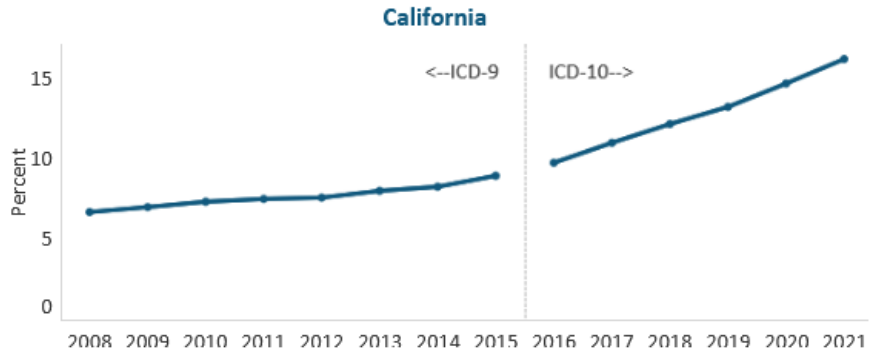
California

16.1%

Any Hypertension at Delivery 2021



Health conditions such as asthma, diabetes, and hypertension, experienced before, during, and after pregnancy, are associated with poor maternal and infant health outcomes. Pregnant individuals with these conditions face increased risk for outcomes such as preeclampsia, preterm birth, low birthweight birth, birth defects, and infant death. Those with hypertension during pregnancy are at increased risk of developing chronic hypertension and heart disease later in life. Similarly, diabetes during pregnancy increases the risk for future type 2 diabetes. Recommended preventive medical visits provide opportunities for screening and management of these conditions to optimize maternal and infant health. Of note, clinical guidelines and hospital coding practices for diagnoses may change over time and affect prevalence at delivery hospitalization.



Select Indicator Group: Hypertension

Select Year: 2021

HCAI Data Populates CDPH Maternal Health Viz

This viz is cited as an example in a recent National Academy for State Health Policy report: Public Health Modernization Toolkit (8/31/2023).

Data Source

California Department of Health Care Access and Information, Patient Discharge Data, 2008–2021: Data sets of inpatient data collected from California-licensed hospitals in California. Each data set consists of individual inpatient records, one record for each inpatient discharged from a California-licensed hospital. Licensed hospitals include general acute care, acute psychiatric, chemical dependency recovery, and psychiatric health facilities. Each patient discharge record contains the patient's demographic information, International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) or International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis and procedure codes, and other information related to the patient's stay in the hospital.

Source: CDPH, Maternal Health Conditions at Delivery

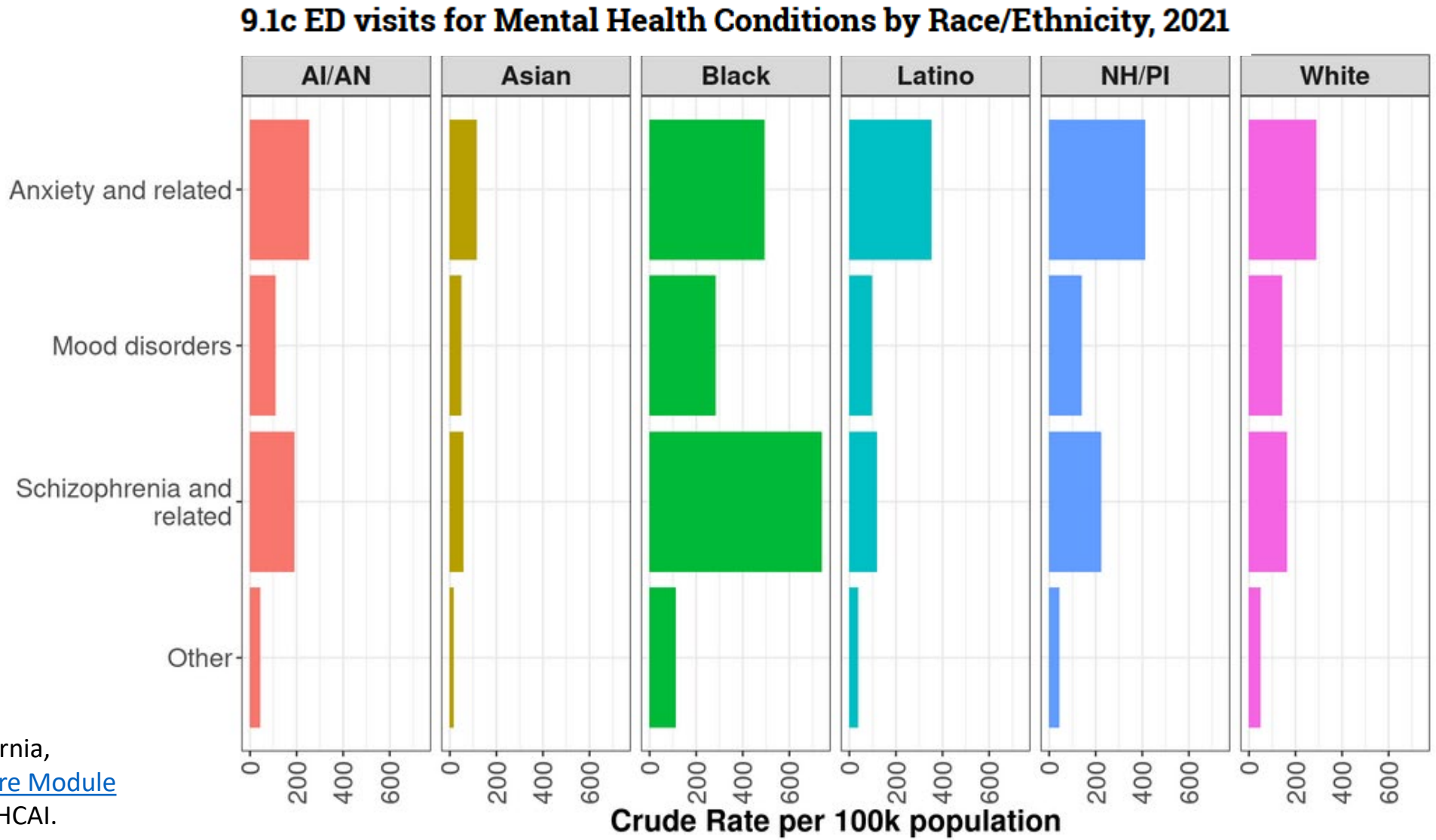
HCAI Department of Health Care Access and Information

HCAI Data Populates CDPH Let's Get Healthy California

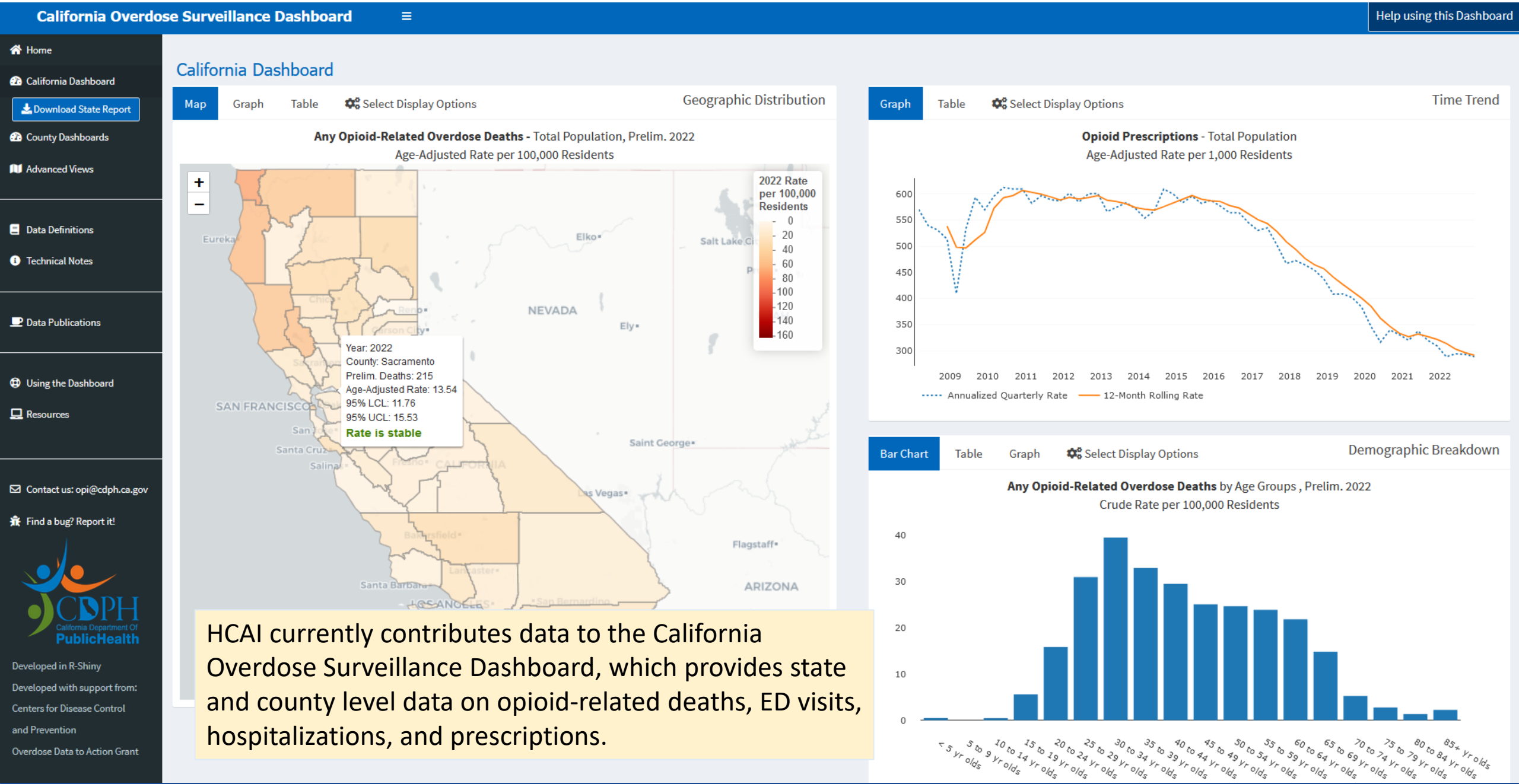
Schizophrenia was the leading cause of ED visits for mental health conditions for Black individuals, with a rate more than 3x any other race or ethnicity.

Anxiety and related disorders were the leading cause of ED visits for MH conditions for all races and ethnicities other than Black populations.

Asian individuals had the lowest rates of ED visits for all mental health disorders.



Source: CDPH, Let's Get Healthy California, [California State Health Assessment Core Module 2023 Update](), 9.1.c. Data provided by HCAI.



HCAI currently contributes data to the California Overdose Surveillance Dashboard, which provides state and county level data on opioid-related deaths, ED visits, hospitalizations, and prescriptions.

HPD Use Case Example: Opioid Epidemic

What can we learn from HPD that can contribute to addiction treatment and prevention?

- Identify prevalence of common pain conditions, prevalence of opioid use disorder, and top diagnoses at initial prescription for chronic users
- Develop longitudinal portraits of patient populations that are associated with long-term opioid prescribing patterns
- Analyze the cost of treatment for acute and chronic pain conditions, by type of treatment and care setting
- Analyze the cost of treatment for opioid use disorder, by type of treatment and care setting
- Quantify out-of-pocket costs for treatment for opioid use disorder; explore variation by payer type, patient demographics, geography, and social drivers of health
- Offer reporting at payer/provider group level on prescribing volumes and addiction treatment (e.g., percent of members with opioid use disorder on medications, number of naloxone prescriptions) to assess need for intervention and to evaluate outreach efforts to prescribers

Trends in Rates | Recent Rates | Rates by Age | County Rates

Compare By: Sex | Race/Ethnicity | Age | California Region

- [ ] All Races
- [x] American Indian / Alaska Native
- [x] Asian / Pacific Islander
- [x] Non-Hispanic Black
- [x] Hispanic
- [x] Non-Hispanic White

Sex
Selected: Female [+]

Age
Selected: All Ages [-]

- (•) All Ages
- ( ) Ages < 50
- ( ) Ages 50-64
- ( ) Ages 65+
- ( ) Ages 15-39
- ( ) Ages 40-64
- ( ) Ages 65-74
- ( ) Ages 75+

**Some groupings are not shown due to sparse data.*

California Region
Selected: California [-]

- (•) California
- ( ) Greater Bay Area
- ( ) Los Angeles
- ( ) Greater California

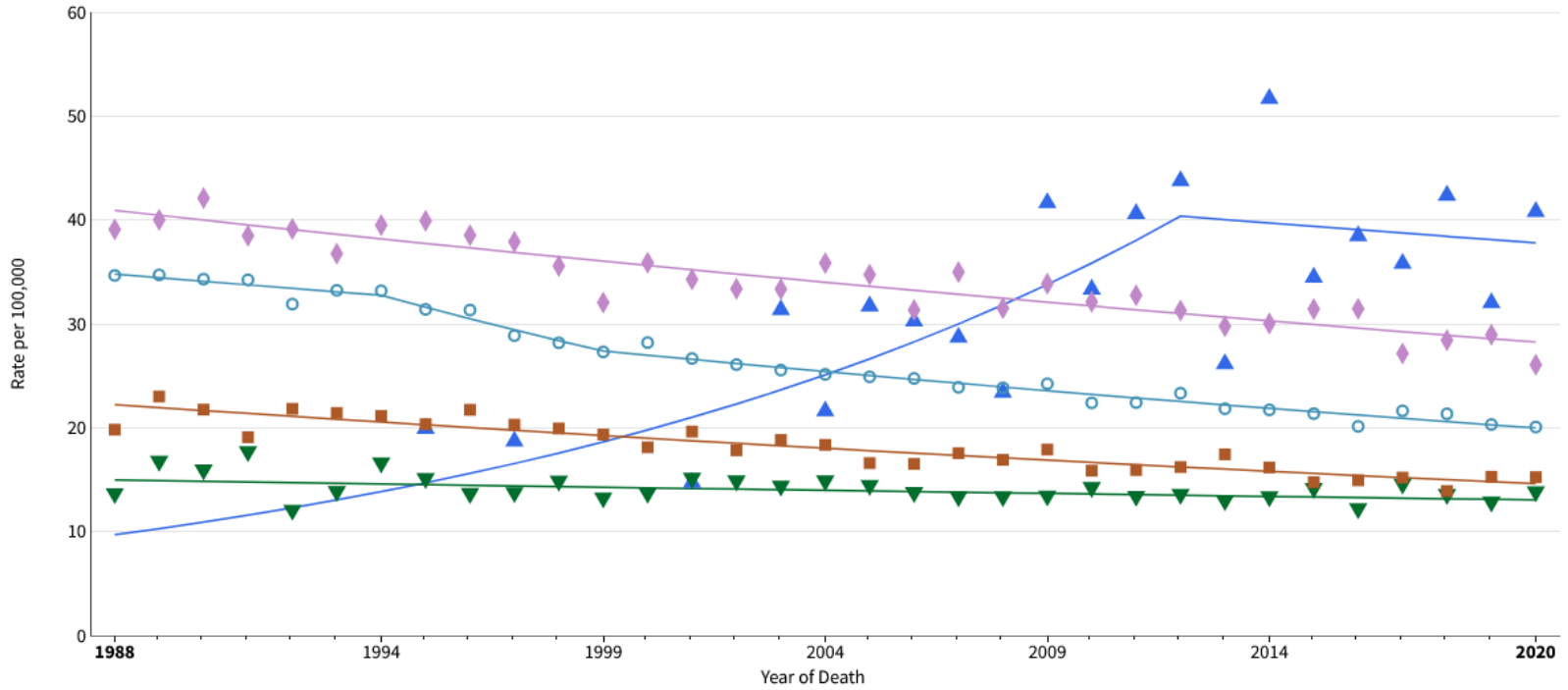
More Options
Precision: 0.1

Breast
Trends in Mortality Rates, 1988-2020
By Race/Ethnicity, Female, All Ages, California

Graph | Data Table

Existing public health data asset: California Cancer Registry, started in 1985, collects information about all cancers diagnosed in California,* with mandated reporting.

Tap/hover on points for more details. [x] View APC



Annual Percent Change (APC)

Choose an option: Non-Hispanic Black

Year Range	APC %	Direction
1988-2020	-1.2	↓

Legend (Race/Ethnicity)
▲ American Indian / Alaska Native[a]
▼ Asian / Pacific Islander
◆ Non-Hispanic Black
■ Hispanic
○ Non-Hispanic White

California Cancer Registry Cal*Explorer Application

*Exception: basal and squamous cell carcinoma of the skin and carcinoma in situ of the cervix, California Cancer Registry.

HCAI Department of Health Care Access and Information

HPD Use Case Example: Cancer Research

What can we learn by combining utilization and payment data (HPD) with staging and demographic data (registry)?

- Quantify out-of-pocket costs for cancer treatment; explore variation by payer type, patient demographics, social drivers, and geography
- Develop longitudinal portraits of patient populations that are associated with higher/lower probability of cancer diagnosis
- Investigate disparities by comparing utilization and prescribing patterns based on patient race/ethnicity
- Explore variation in treatment cost and/or outcomes based on cancer stage at diagnosis
- Document the prevalence of various types of cancer; explore variation by payer type, patient demographics, geography, and social drivers of health
- Document the cost of various types of cancer; explore variation by payer type, patient demographics, and geography
- More challenging: (due to complex external data sets and time aspects): Investigate community conditions that are associated with higher risk for cancer.

Public Health Stakeholder Input

- California Department of Public Health, Office of Strategic Development and External Relations (Fusion Center)
- California Conference of Local Health Officers, Health Systems Integration Committee
- Public Health Institute
- Healthy Places Index / Public Health Alliance of Southern California
- Local Public Health Officers – HCAI conducts annual outreach and engagement on HCAI data assets that includes local public health officers. Several follow-up discussions specific to HPD have been convened or scheduled.
- Submissions to HPD visualization Request for Feedback form, several of which have come from public health stakeholders

Submission to HPD via Visualization Feedback Button

Researcher	Can the HPD data be linked with the California Cancer Registry (CCR) data for research purposes, as well as improving the quality and completeness of the CCR data capture?	The HPD data are extremely valuable for better understanding the health disparities, developing public health goals and policies to benefit population health. Linking HPD data with other existing health surveillance data is an effective and efficient way to expanding the data capture and utility.	I would like to know if there is already a committee/taskforce/workgroup at HPD on guiding/deciding how to make the HPD data more accessible to improve public health goals and initiatives.

Themes from Stakeholder Input

- **Strong interest in HPD** as a potential resource to support public health goals and use cases, including reducing disease burden and disparities, targeting interventions, and evaluating outcomes
- Interest in **exploring opportunities to link HPD to existing public health data assets**, such as the California Cancer Registry, for research purposes
- **Lack of awareness of HPD** status and specifics, such as availability of public reports, data sources and elements, timeline for external access
- Interest in data specific to **local geographies** to inform county and sub-county needs assessment, planning, and evaluation
- Request for **geocoding at the member level** to support data users' ability to leverage existing tools and data sources; ideally, also include Health Places Index score

"Incredible opportunity for public health"

Recommendations, Discussion and Next Steps

Discussion Questions

1. What are your thoughts on draft recommendations 1-4?
2. Do you have any additional recommendations to suggest?
3. Should any of the draft recommendations be dropped?
4. Are there additional public health stakeholders that should be consulted?

Next Steps

1. HCAI will revise the draft recommendations based on feedback.
2. HCAI will solicit additional input from stakeholders and experts prior to the April 2024 meeting.
3. Advisory Committee members will vote on the revised recommendations at the April 2024 meeting.

DRAFT

1. The Advisory Committee recommends that HCAI:

Engage public health officials and other stakeholders at the state and local level to share information about HPD as a resource – both public reporting offerings and data access pathways.

Activities could include:

- HPD representation on one or more California Department of Public Health or California Conference of Local Health Officers governing bodies
- Representation from CDPH or CCLHO on HPD committees or workgroups
- Conduct an Ask the Analyst session focused on public health topics; consider making it an annual or biannual event.
- Present at statewide conferences or convenings focused on public health topics

DRAFT

2. The Advisory Committee recommends that HCAI:

Explicitly incorporate public health use cases into the prioritization process for HPD public reporting.

Activities could include:

- Invite public health stakeholders to present at an HPD Advisory Committee meeting about high-value public reports to consider
- Solicit input from key public health stakeholders, such as the California Department of Public Health, during the annual prioritization process

DRAFT

3. The Advisory Committee recommends that HCAI:

Consider opportunities to enhance the HPD with additional features and data elements that facilitate public health analysis.

Activities could include:

- Make geocoding available through the enclave to enable place-based analysis
- Make the Healthy Places Index score, or other place-based metric, available through the enclave to facilitate analysis of equity and disparities
- Pursuing incorporating key elements from vital statistics data, such as cause of death, to enable research on topics such as maternal/infant mortality.

DRAFT

4. The Advisory Committee recommends that HCAI:

Explore approaches to pairing HPD with disease registries and other public health datasets to enable public health-oriented research and evaluation, in partnership with the California Department of Public Health.

Activities could include:

- Coordinate with the CDPH to identify high-priority use cases for HPD data in public health research
- Identify options for connecting HPD and registry data, including but not limited to record-level matching
- Focus initially on the California Cancer Registry as the registry with the longest tenure (started in 1985)

DRAFT

The Advisory Committee recommends that HCAI:

1. Engage public health officials and other stakeholders at the state and local level to share information about HPD as a resource – both public reporting offerings and data access pathways.
2. Explicitly incorporate public health use cases into the prioritization process for HPD public reporting.
3. Consider opportunities to enhance the HPD with additional features and data elements that facilitate public health analysis.
4. Explore approaches to pairing HPD with disease registries and other public health datasets to enable public health-oriented research and evaluation, in partnership with CDPH.

Recap: Discussion and Next Steps

Discussion Questions

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Public Comment