### Agenda III: HPD Data Quality Completeness Required for Analysis and Linkage

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### **Data Collection**



### HPD Data File Types

- HPD accepts data in three main types of files:
  - Eligibility member demographics, enrollment and coverage details
  - Claims/Encounters specifics of the service provided, what was done, where, by whom, and cost (if applicable) – Medical, Pharmacy included, Dental in 2024
  - Provider demographics, location and specialty (must include all providers included on the previous two file types)
- Two main file formats:
  - National standard APCD-CDL<sup>™</sup> used by all commercial submitters and DHCS
  - CMS Medicare FFS proprietary format
- Medicare FFS data for 2021 was NOT available for the extract used for Public Reporting



### **HPD Data Collection Process**





# Data Quality and Completeness



### Data Quality

- In March 2024, HCAI will submit a report to the Legislature that will include information on HPD data quality.
- Today's focus is on data completeness a key aspect of data quality. Data completeness informs HCAI's approach to public reporting.

Preview of topics to be covered in the March 2024 Status Report to Legislature:

- Covered lives
- Percent of population
- Voluntary submission (e.g., ERISA, small plans)
- Variation of completeness
  across geographic regions
- Frequency of submissions by type of data
- Hospital and physician data



# Data Completeness – Identification of Medical Services



0.00% 10.00% 20.00% 30.00% 40.00% 50.00% 60.00% 70.00% 80.00% 90.00% 100.00%

The high population of these fields allows HPD to confidently and reliably identify common services and diagnoses. Procedure Code includes services such as office visits and the good population of the Procedure Modifier allows for further detail. Revenue code only applies to Inpatient services.



### Data Completeness - Pharmacy Claims/Encounters



0.00% 10.00% 20.00% 30.00% 40.00% 50.00% 60.00% 70.00% 80.00% 90.00% 100.00%

The high population of the NDC Drug Code allows HPD to identify common prescriptions. The lower percentages for Prescribing NPI and Pharmacy NPI that identify who wrote the prescription and where it was filled are due to Medicare FFS data, both Commercial and Medi-Cal are 100%.



#### Data Completeness – Claims/Encounters Characteristics



These key fields tell HPD about the type of location of the service provided, when it occurred, who rendered the service and whether it was paid under Fee-for-Service (FFS) or Capitation.



# Data Element Completeness – Race, Ethnicity & Language



Although the technical completeness of Race appears high (85%), a closer look at the submitted values shows a high percentage of "Other" and "Unknown" which are valid values. Data for 2020 across all payer types.



### APCD-CDL <sup>™</sup> v3.0.1- inclusion of SOGI

#### • APCD-CDL<sup>™</sup> v3.0.1 will include:

- Revision of Member Gender to Member Sex (biological) to member eligibility, medical, pharmacy, and dental files
- Added Member Gender Identity and Member Sexual Orientation to member eligibility file
- Implementation of APCD-CDL<sup>™</sup> v3.0.1 in February 2024.
- Preliminary analysis of completeness of collected SOGI data anticipated in Q1 2025.



## Data Linkages



### Combining and Linking Data

- Data requesters may wish to combine HPD data with other datasets, without linking (no matching)
- Data requesters may also wish to link HPD data with other datasets
  - Matching can be done at the aggregate level or at the record level
- Data requesters will have to inform HCAI how they plan to combine or link HPD data with other types of data
- Data quality of identifiers is essential for effective linkage
- Linkage will build heavily on HCAI's work matching records within the HPD database



### HPD Member Matching Capability

- Meaningful analysis and linkage of HPD data relies on the ability to uniquely identify individuals across various datasets, payers and providers
- HPD uses a number of key identifiers for member matching
  - Data element completeness for the HPD key identifiers is at or close to 100%
- Overall, HPD displays strong capability for member matching



### Challenges with Linking HPD Data

- Linkages with Standard Limited Data Sets may be difficult or require complex methodologies
- Research identifiable data will only be available to researchers
- Requesters will need the skills to perform the linkage; HCAI staff will have limited ability to provide technical assistance on linkage
- Linkage creates additional requirements for HCAI staff for deidentifying analytic outputs from the Enclave



### **Discussion Questions**

- What would you like to know about data quality when reviewing a data request application?
- What types of support or information will you need when reviewing a data request from an entity that plans to link HPD to other datasets?

