Executive Summary

The Health Care Payments Data Program: Enabling Health Care Improvement in California

In 2018, the California State Legislature took a crucial step forward in enabling a more efficient and effective, and thus more affordable, health care system in California. The intent of the Legislature in Assembly Bill (AB) 18101 was to:

- Establish a system to collect information regarding the cost of health care and a process for aggregating such information from many disparate systems, with the goal of providing greater transparency regarding health care costs.
- Improve data transparency to achieve a sustainable health care system with more equitable access to affordable and high-quality health care for all.
- Encourage use of such data to deliver health care that is cost effective and responsive to the needs of enrollees, including recognizing the diversity of California and the impact of social determinants of health.

The Office of Statewide Health Planning and Development (OSHPD) refers to this effort as the Health Care Payments Data (HPD) Program, including the necessary planning, processes, resources, and system (“HPD System”) to meet the intended goals of the legislation. In gathering, integrating, and organizing information about how health plans and insurers pay for care, the HPD System offers an unprecedented opportunity to address health care costs and drive improvement in California’s health care system. With the implementation of the Affordable Care Act, California made great strides in reducing the number of uninsured—but costs continue to rise unabated. A recent report found that California state spending on health and human services increased by 96 percent between 2009 and 2018, while spending on all other programs increased by 59 percent.1 For California families with employer-sponsored coverage, average total health-related spending exceeded $24,000 in 2018, fully 34 percent of median household income.2 Californians are more worried about paying for health care than housing, perhaps because nearly half experienced a problem accessing medical care due to cost.3

The new HPD System will support initiatives recently announced by Governor Newsom aimed at addressing costs and improving system performance, including the Office of Health Care Affordability and the Center for Data Insights and Innovation.4

The HPD System will:

Provide visibility on how California spends $300 billion on health care annually.

Researchers will be able to explore price variation for specific conditions, services, and

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1 Assembly Bill 1810 (Committee on Budget, Chapter 34, Statutes of 2018) added Chapter 8.5, Health Care Cost Transparency Database, to the Health and Safety Code, Division 107, Part 2.
procedures, statewide and by geographic area. The uniform structure of the HPD System’s data will allow easier comparisons among Medicare, Medicaid, and commercial health plans and insurers. The service-level detail of the HPD System data also will help policymakers identify the elements of California’s health care system that are driving up costs and support design of targeted interventions.

**Identify and act on opportunities to improve California’s health care system.** California has a complex health care landscape that, to date, has lacked a comprehensive overview of system performance. With the HPD System, cost, utilization, and quality measures can be compared across payers and regions, allowing California policymakers and others to assess the results of new initiatives and learn from the success of alternative approaches.

**Support health care research that directly benefits Californians.** The HPD System will become one of the largest research databases of its kind, enabling a wide range of projects that align with the Program’s purposes. As understanding grows of the key role played by social determinants in health outcomes, the ability to link health care services data to social services and other data becomes increasingly important. The HPD System will facilitate linkages with other datasets (e.g., economic, environmental, social, clinical), creating opportunities to improve state programs informing the development of new health care policies, initiatives, and delivery systems.

**Key Findings and Recommendations**

As required by AB 1810, OSHPD convened a Review Committee composed of health care stakeholders and experts to advise on the design and ongoing administration of the system. This Report to the Legislature is based on the recommendations of the Review Committee and subject matter experts. The Review Committee met monthly between March 2019 and February 2020. Members contributed insights from a variety of perspectives, including payers, providers, consumers, and researchers. Throughout the process, the Review Committee members provided thoughtful recommendations reflecting their commitment to improving California’s health care system and their experience with creating, analyzing, and using health care data. Their feedback to OSHPD on the design of the HPD System factored in the approaches and experiences that other states have taken to develop their all-payer claims databases (APCDs) and the best path forward for California.
The Review Committee met monthly between March 2019 and February 2020 and provided a series of recommendations, all unanimously approved through member votes, on the design of the HPD Program.

Charles Bacchi  
President & CEO, California Association of Health Plans  
Representing health care service plans, including specialized health care service plans

Anne Eowan  
Senior Vice President, Government Affairs/Secretary, Association of California Life and Health Insurance Companies  
Representing insurers that have a certificate of authority from the Insurance Commissioner to provide health insurance, as defined in Section 106 of the Insurance Code

Terry Hill, MD  
Chair, California Medical Association (CMA) Administrative Medicine Forum  
Representing “suppliers” defined as a physician and surgeon or other health care practitioner, or an entity that furnishes health care services other than a provider

Amber Ott  
Group Vice President, Data and Analytics, California Hospital Association  
Representing “providers” defined as a hospital, a skilled nursing facility, a comprehensive outpatient rehabilitation facility, a home health agency, a hospice, a clinic, or a rehabilitation agency

Emma Hoo  
Director, Pay for Value, Pacific Business Group on Health  
Representing self-insured employers

Ken Stuart (Review Committee Chair)  
Chairman, California Health Care Coalition  
Representing multiemployer self-insured plans that are responsible for paying for health care services provided to beneficiaries or the trust administrator for a multiemployer self-insured plan

John Kabateck  
California Executive Director, National Federation of Independent Business  
Representing businesses purchasing coverage for employees

Joan Allen  
Government Relations Advocate, Service Employees International Union – United Healthcare Workers West  
Representing organized labor

Anthony Wright  
Executive Director, Health Access California  
Note: Mary June Diaz, Health Access California, served March through August 2019. Anthony Wright served September 2019 through February 2020  
Representing consumers

William (Bill) Barcellona  
Senior Vice President, Government Affairs, America’s Physician Groups  
Representing physician groups

Cheryl Damberg, PhD (Review Committee Vice Chair)  
Distinguished Chair in Health Care Payment Policy, RAND Corporation  
Representing the research community
A summary of the key findings of this Report and the recommendations of the Review Committee are presented below.

**Purpose and Use Cases**
APCDs—large-scale databases that systematically collect health care claim and encounter data from multiple payer sources within a state—are viewed as essential resources to support system-wide transparency and the development of informed policies to realize meaningful and lasting health system change. California follows the lead of 19 other states with active APCDs, and can learn from that experience to create a highly efficient and effective program. The HPD System fits well with OSHPD’s mission, experience, and existing range of data assets. By aggregating claim and encounter data from multiple payers, the HPD System has tremendous potential to address a wide array of important questions about California’s health care system. The HPD System can streamline and improve California’s ability to monitor health system performance through more complete and standardized data, enabling a better, lower-cost approach to planning and evaluating programs and improvement initiatives. The variety and volume of data the HPD System will collect and link to will increase over time, as will the complexity of supported analyses.

**Use Case Categories and Selected Topics**

<table>
<thead>
<tr>
<th>COST AND UTILIZATION</th>
<th>QUALITY</th>
<th>COVERAGE AND ACCESS</th>
<th>POPULATION AND PUBLIC HEALTH</th>
<th>CALIFORNIA HEALTH SYSTEM PERFORMANCE</th>
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<tbody>
<tr>
<td>• Utilization and spending</td>
<td>• Preventive screenings, immunizations—variation and comparison</td>
<td>• Coverage trends over time and by geography</td>
<td>• Chronic conditions (e.g., diabetes, asthma) prevalence, cost, quality</td>
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<tr>
<td>• Price transparency</td>
<td>• Continuity of care (transitions in care setting, coverage)</td>
<td>• Access to care, including specialty care, dental, and behavioral health</td>
<td>• Opioid prescribing</td>
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<td>• Price variation among providers</td>
<td>• Readmissions, hospital-acquired infections, and preventable hospitalizations</td>
<td>• Patient cost-sharing</td>
<td>• Firearm injuries—incidence, cost</td>
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<tr>
<td>• Total Cost of Care</td>
<td>• Preventable emergency department visits</td>
<td>• Rate review/rate-setting</td>
<td>• Connection between environment and chronic conditions (e.g., air quality and asthma)</td>
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<tr>
<td>• Benchmarking</td>
<td>• Pharmaceutical cost, utilization</td>
<td>• Insurance coverage</td>
<td>• Epidemiology: trends in cancers, infectious diseases, behavioral health conditions</td>
<td></td>
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<tr>
<td>• Cost-effectiveness</td>
<td>• Oral health cost, utilization</td>
<td>• Network adequacy</td>
<td>• Effects of delivery system consolidation on cost, quality, access, equity</td>
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<tr>
<td>• Low-value care</td>
<td>• Behavioral health cost, utilization</td>
<td>• Premiums</td>
<td>• Evaluation of new models of care and payment</td>
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<tr>
<td>• Cost of avoidable complications</td>
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<td>• Integration of physical and behavioral health care</td>
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<tr>
<td>• Pharmaceutical cost, utilization</td>
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<td>• Care coordination for specific populations, e.g., dual eligibles</td>
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<tr>
<td>• Oral health cost, utilization</td>
<td></td>
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<td>• Prevalence/trends in alternative payment models</td>
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Data Sources and Submitters
To maximize its utility and value for California policymakers and others interested in improving California’s health care system, the HPD System’s database should be as comprehensive as possible—including medical, pharmacy, and dental services. The HPD Program anticipates collecting health care data for over 34 million Californians, sourced from: the Department of Health Care Services (DHCS) for Medi-Cal members; the Centers for Medicare & Medicaid Services (CMS) for Medicare fee-for-service members; and commercial health plans and insurers for those with employer-based, individual, or Medicare Advantage coverage. Private, self-insured companies interested in reducing costs and improving system performance will be encouraged to participate in the HPD Program on a voluntary basis.

HPD Target Populations and Data Submitters

<table>
<thead>
<tr>
<th>COVERAGE CATEGORY</th>
<th>COVERED LIVES (Millions)</th>
<th>DATA SUBMITTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medi-Cal Managed care</td>
<td>10.5</td>
<td>California Department of Health Care Services (DHCS)</td>
</tr>
<tr>
<td>Fee for service (FFS)</td>
<td>2.3</td>
<td>DHCS</td>
</tr>
<tr>
<td>Medicare Medicare Advantage (Part C) and Medicare Advantage with Prescription Drug Coverage</td>
<td>2.6</td>
<td>Health plans and insurers</td>
</tr>
<tr>
<td>Fee for Service (Parts A, B, and D)</td>
<td>3.5</td>
<td>Centers for Medicare &amp; Medicaid Services (CMS)</td>
</tr>
<tr>
<td>Commercial Fully insured</td>
<td>14.4</td>
<td>Health plans/insurers</td>
</tr>
<tr>
<td>Private self-insured (voluntary)</td>
<td>4.6</td>
<td>Health plans/insurers or other third-party administrators (TPAs)</td>
</tr>
<tr>
<td>Public self-insured</td>
<td>0.9</td>
<td>Health plans/insurers or other TPAs</td>
</tr>
</tbody>
</table>

Sources and Notes:
- Individuals can have more than one coverage source during the year; the largest source of duplication is dual eligibles (Medicare plus Medi-Cal) with 1.4 million.
- Medicare figures from CMS (Medicare Enrollment Dashboard Data File, April 26, 2019).
- Estimates for private vs. public self-insured plan enrollment based on a 2017 bulletin from the U.S. Department of Labor, Health Insurance Coverage Bulletin: Abstract of Auxiliary Data for the March 2016 Annual Social and Economic Supplement to the Current Population Survey. According to Table 3A, 84 percent of self-insured employer-sponsored coverage in California in 2015 was private and 16 percent was public. Those percentages were applied to the 5.5 million Administrative Services Only (ASO)/self-insured enrollment estimate for 2018 (see Exhibit 21).

Like other APCDs, the HPD System will rely primarily on claim and encounter data, which are generated by transactions among payers and providers on behalf of insured individuals. The HPD System anticipates adopting a proposed national standard, the APCD Common Data LayoutTM (APCD-CDL™) for commercial submitters and for Medi-Cal claim and encounter data. A standardized format will reduce burden for data submitters, particularly health plans and insurers that submit data to multiple state APCDs. Given the importance of managed care in California’s market, the HPD System will also collect information about non-claims payments.
including capitation and alternative payment models (e.g., shared savings for accountable care organizations).

**Governance, Privacy, and Security**

OSHPD’s role as an independent, neutral convener in California, with a mission of supporting informed decisions, aligns with the goals of the HPD Program. The HPD System will leverage OSHPD’s track record working with stakeholders on data initiatives, producing analytics and information for policymakers and the public, and handling data requests from outside organizations. Stakeholder engagement at multiple levels will be a bedrock feature of HPD Program governance. A Health Care Data Policy Advisory Committee of stakeholders will provide guidance on the HPD System, and a Data Release Committee will advise on requests for access to non-public data. Other committees and workgroups, such as those representing data submitters and data users, will provide input and insights essential to the System’s effective functioning—particularly in the implementation phase.

California has long led the nation in developing robust privacy and security standards to protect personal information, particularly when it comes to information regarding individual health status. Consistent with this history and philosophy, a core principle is that the HPD System is established primarily to learn and provide information about health care systems and populations, not individual patients. OSHPD has considerable experience managing the collection, analysis, protection, and appropriate sharing of data from hundreds of hospitals and other health care facilities throughout California, and will bring that expertise to bear on the central objective: ensuring personal information is protected while meeting public policy and system improvement goals.

**System Administration and Capabilities**

Other states have taken a variety of approaches to system implementation and operations, ranging from in-house control and operations to outsourcing virtually all functions to one or more vendors. For the HPD System, a hybrid approach to implementation, combining OSHPD capabilities and assets with experienced vendors and subject matter experts, presents the most promising pathway in terms of efficiency, time to launch, and flexibility to adapt. California’s immense size points toward a tiered implementation, focusing initially on core data (claims, encounters, and eligibility and provider files) and subsequently expanding to include dental and non-claims data (e.g., alternative payment models). Robust data quality processes are essential for the credibility and sustainability of the HPD System, and these will be developed and implemented based on best practices.

Another feature of the HPD System is the potential for appropriate research entities, under data use agreements that secure individual privacy, to evaluate patients and providers across data sources and analyze them over time. Doing so would enable pattern and trend analysis even as people change health plans and obtain care from multiple providers. This record-matching feature would also facilitate linkages between the HPD System and other datasets with complementary information, such as OSHPD’s hospital discharge data, that can enhance researchers’ ability to answer important questions about health care in California. In addition, in
an era of growing understanding of the social determinants of health and their connection to health outcomes and community health, linking the HPD System’s data on costs and utilization to information about social services such as food or housing support will become increasingly important.

**Funding and Sustainability**

The HPD System will be a statewide resource and will require investment to build and operate. The Legislature appropriated $60 million on a one-time basis to support the initiative, including planning, development, and build through Fiscal Year 2025. For ongoing operations, the Legislature required development of a sustainability plan without reliance on General Fund revenue. Annual costs to support the HPD System are estimated at approximately $15 million based on the experience of other states, results from a request for information process with the vendor community, and an assessment of OSHPD current staffing levels and resources. To be successful over the long term, the HPD System needs a funding model that provides predictable revenue that covers annual operating costs. Most other APCDs rely on a combination of state funds, Federal Financial Participation (FFP) Medicaid match, grants, and data user fees for requests. FFP Medicaid match and user fees are both promising sources of revenue for the HPD System, but are unlikely to yield $15M annually; additional funding sources are needed to close the gap.

**Launching the Health Care Payments Data System: The Path Forward**

The legislature specified in AB 1810 that the HPD System is to be substantially completed by July 1, 2023. That timeline is ambitious, but the thoughtful deliberations of the Review Committee and resulting recommendations represent a major step forward in realizing a goal California has been working toward for years: to create the most comprehensive and robust data ever available to inform improvements in California’s health care system. Realizing California’s goal of equitable, affordable access to high-quality care for all will require not just investment and effort, but also data—information that can support tracking system performance; understanding variation in cost, quality and utilization; and driving improvement.
Recommendations Approved by the Review Committee

The Review Committee voted on and unanimously approved 36 recommendations for the HPD Program.

Data Sources and Submitters

Review Committee recommendations related to data sources (Chapter 2) and submitters (Chapter 4):

1. **Sources of Data**: The HPD Program should establish collection methods and processes specific to sources of data: 1) Department of Health Care Services (DHCS, for Medi-Cal), 2) Centers for Medicare & Medicaid Services (CMS, for Medicare Fee for Service (FFS)), and 3) All other, including commercial health plans and insurers for those with employer-based, individual, Medicare Advantage, or dental coverage.

2. **Collect Medi-Cal Data**: The HPD Program should pursue the collection of Medi-Cal FFS and managed care data directly from DHCS.

3. **Incorporate Medicare Data**: The HPD Program should pursue the collection of Medicare FFS data, in the formats specified by CMS.

4. **APCD-CDL™**: The HPD System should use the APCD-CDL™ for all submitters except CMS.

5. **Three Years of Historical Data**: The HPD Program should initially pursue three years of historical data (enrollment, claims and encounters, and provider) from submitters.

6. **Non-Claims Based Payments**: The HPD System should collect non-claims-based payments, in order to capture the total cost of care. Since these payments are not included in the APCD-CDL™, the Office of Statewide Health Planning and Development (OSHPD) will work with stakeholders to specify the format(s) and source(s) of the supplemental file(s).

7. **Authority to Submit and Collect Personal Information**: Legislation should clearly authorize data submitters to send, and OSHPD to receive, personal information to meet the legislative intent of the HPD Program. To support the submission of data by voluntary submitters, legislation should clearly specify public health as one of the intended uses of the HPD System.

8. **Mandatory Data Submitters**: The types of organizations required to submit data to the HPD System ("mandatory submitters") should be based on federal and existing California laws and definitions, and initially include:
   a. Health care service plans and health insurers
   b. DHCS, for Medi-Cal managed care plan and fee for service data
   c. Self-insured entities as permitted under federal law (currently, public payer plans such as state, county, and local governments that are not subject to ERISA)
   d. Third-party administrators of plans (not otherwise preempted by ERISA)
   e. Dental plans and insurers
Standards for mandatory submission should be broadly specified in statute and clearly defined in regulations, with initial guidance as follows (applies to Recommendations nine through fourteen):

9. **Required Lines of Business:**
   a. Commercial: individual, small group, large group, Medicare Advantage
   b. Self-insured plans as permitted under federal law (currently, public payer plans such as state, county, and local governments that are not subject to ERISA)
   c. Dental
   d. Medi-Cal FFS and managed care

10. **Coordination of Submission:** The mandatory submitters are responsible for submitting complete and accurate data directly and facilitating data submissions from appropriate data owners, including data feeds from pharmacy benefit management companies, behavioral health organizations, subsidiaries, and other services carved out to a subcontracting organization.

11. **Excluded Lines of Business:** All those listed in Insurance Code section 106b as excluded from the definition of health insurance, plus the following:
   a. Supplemental insurance (including Medicare supplemental)
   b. Stop-loss plans
   c. Student health insurance
   d. Chiropractic-only, discount, and vision-only insurance

12. **Plan Size:**
   a. OSHPD shall establish an exemption for plans below a threshold not to exceed 50,000 covered lives to be defined and overseen by OSHPD with consideration given to feasibility, cost, and value of data procurement, for:
      i. Combined Medicare Advantage, commercial, and self-insured plans not subject to ERISA
      ii. Dental
   b. Given that DHCS will be submitting Medi-Cal data, there is no plan size threshold for Medi-Cal FFS or managed care.
   c. With consultation between OSHPD and Covered California, all Qualified Health Plans (plans participating in Covered California) are required to submit either directly or through Covered California.

13. **Frequency:**
   a. Monthly submission for all core data (claims, encounters, eligibility, and provider files)
   b. Submission at least annually for non-claims-payments data files

14. **Population:** The population for data submission is defined as residents of California

15. **Voluntary Submitters:**
   a. The HPD Program should be statutorily authorized to receive data from voluntary submitters.
   b. The HPD Program shall develop an appropriate process to encourage voluntary data submission.
Governance, Privacy, and Security
Review Committee recommendations related to governance (Chapter 9), privacy, and security (Chapter 6):

16. **Entity to Operate the Health Care Payments Data (HPD) Program**: OSHPD should operate the HPD Program.

17. **Health Care Data Policy Advisory Committee**: OSHPD should be authorized to convene a Health Care Data Policy Advisory Committee of stakeholders with expertise to provide guidance on the HPD Program. Over time, OSHPD may expand the scope of the Advisory Committee to obtain guidance on other data assets in the OSHPD portfolio.

18. **Committees to Support Effective Governance**: OSHPD should create other committees or workgroups to support effective governance as needed, at the discretion of the Director, either as standing bodies or as time-limited ad hoc workgroups.

19. **Leverage Regulatory Structures for Enforcement**: OSHPD should establish processes for the enforcement of data submission, leveraging existing regulatory structures. Statutory authority should be provided to establish specific processes.

20. **Comprehensive Program for Data Use, Access, and Release**: OSHPD should have statutory authority to implement a comprehensive program for data use, access, and release for the HPD Program. This program will emphasize both the creation of publicly available information and ensuring only appropriate, secure access to confidential information. The health care payments database should be exempt from the disclosure requirements of the Public Records Act.

21. **Data Release Committee**: OSHPD should be required to establish a Data Release Committee to advise OSHPD on requests for access to non-public data. The Data Release Committee members should be appointed by the OSHPD Director and include a diverse range of stakeholder representatives with expertise in issues that need to be considered in the release of non-public data. OSHPD will maintain information about requests and disposition of requests. OSHPD and the Data Release Committee should develop processes for the timely consideration and release of data.

22. **Privacy Principles**: The HPD Program should adopt the following patient privacy principles:
   a. The HPD Program shall protect individual patient privacy in compliance with applicable federal and state laws.
   b. The HPD Program is established to learn about the health care system and populations, not about individual patients.

23. **Limiting Access to Non-Public Data**: Only aggregate de-identified information will be publicly accessible. OSHPD should develop a program governing access to non-public HPD System data, including a data request process overseen by a data release committee.

24. **Information Security Program**: The HPD Program should develop an information security program that uses existing state standards and complies with applicable federal and state laws.
System Administration and Capabilities

Review Committee recommendations related to system administration, including technical approach (Chapter 7), data quality (Chapter 8), and linkages (Chapter 3):

25. **Leverage Resources and Expertise**: OSHPD should leverage existing resources and expertise to facilitate a faster time to implement, maximize the early capabilities of the system, and learn from subject matter experts in the all-payer and multi-payer database industry.

26. **Modular Approach**: The HPD System should be implemented with a modular approach, with each module performing a discrete system function.

27. **Data Collection Vendor**: Commercial health care data should be initially collected by a vendor with established submitter management and data quality processes, and that is experienced in aggregating/synthesizing/standardizing commercial claims data files from multiple payer sources. It is preferred that the vendor have experience with state APCD programs.

28. **Data Quality Processes**: The HPD Program should develop transparent data quality and improvement processes. In developing the program, OSHPD shall review and leverage known and effective data improvement processes and experiences.

29. **Data Quality at Each Part of the Life Cycle**: Data quality processes should be applied to each major phase of the HPD System data lifecycle, including:
   a. Source data intake
   b. Data conversion and processing
   c. Data analysis, reporting, and release

30. **Stakeholder Access to Data Quality**: The HPD Program should provide stakeholders with accessible information on data quality, including:
   a. Descriptions of processes and methodologies
   b. Periodic updates on known issues and their implications

31. **Ensure broad authority for OSHPD to securely collect available personally identifiable information**: Legislation should ensure authority for OSHPD to securely collect detailed patient identifiers such as first and last name, date of birth, sex, street address, and Social Security number. These identifiers are necessary in order to use methodologies, such as a master patient index, to support analyses of the same individuals over time and the impacts from social determinants of health. OSHPD will ensure that its data collection is in compliance with California and federal law.

32. **The HPD Program should use robust methodologies to match patients, providers, and payers across datasets**: OSHPD should build and maintain a master person index, master provider index, and master payer index as part of the HPD System implementation. These indexes should be supplemented with data from other sources (e.g., vital statistics, statewide provider directory information when available, and OSHPD facility data) to improve matching success and the analytic value of the HPD System.
Funding and Sustainability
Review Committee recommendations related to funding and sustainability (Chapter 5):

33. **Special Fund for the HPD Program**: A special fund should be created for the HPD Program, and revenue to support the HPD Program should be directed to that fund. Any funds not used during a given year will be available in future years, upon appropriation by the Legislature.

34. **Pursue CMS Medicaid Matching Funds**: Maximum possible CMS Medicaid matching funds, or other federal funds, should be pursued to support the HPD Program.

35. **Establish User Fee Schedule to Support the HPD Program**: Develop a fee schedule and charge data user fees for data products to support the HPD Program and stakeholder access to data.

36. **Explore Other Revenue Sources**: For the remainder of HPD Program operational expenditures, other revenue sources should be considered in collaboration with stakeholders.
Endnotes


2 Ibid.
