



**New York State**  
**All Payer Database**  
**Request for Information**

**July 26, 2012**

**RFI 1205180104**

**Schedule of Events:**

<b>Milestone</b>	<b>Date and Time</b>
APD RFI Released	July 26, 2012
Deadline Date for Questions	August 2, 2012 - 12 PM EDT
Deadline for Registration	August 2, 2012 – 12 PM EDT
RFI Response Date	September 6, 2012 - 12 PM EDT

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## **A. Introduction**

### **I. Purpose**

The New York State Department of Health (DOH) is in the process of information gathering and researching possible approaches for establishing an All Payer Database (APD) in the State. The purpose of this Request for Information (RFI) is to gather information from respondents regarding a wide array of operational and technological issues set forth by the Department of Health. This RFI provides prospective respondents an opportunity to submit information and recommend approaches to the design, governance, development, and implementation and operation of an APD to support numerous functions and use cases in the State.

This RFI seeks input from respondents who meet registration requirements as outlined in Section B.I.1. Responders must meet the submission requirements as outlined in Section B.I.2 including completing the required sections in Appendix A. All input provided by prospective respondents will be used for informational purposes only. No awards will result from this Request for Information.

### **II. Background**

Advancing health care transformation in an effective and accelerated manner to address cost, access and quality issues requires a broader view of population health and the performance of the health care system than current data resources permit. A variety of data access issues, such as incomplete or siloed data sets, undermine present efforts. To address these needs, in the spring of 2011, New York State amended the Statewide Planning and Research Cooperative Systems (SPARCS) legislation contained in public health law (PBH § 2816) to continue the SPARCS program and to authorize the collection of data from third party payers. The SPARCS program currently collects clinical and demographic data concerning hospital discharges, emergency department visits, and certain ambulatory surgery and clinic visits. The All Payer Database emerged from the requirement to additionally collect covered person and claims data and from the needs of the healthcare system. A copy of the enabling legislation can be referenced in Appendix F.

The APD will serve as a repository of claims data drawn from all major public and private payers, which may include insurance carriers, health plans, third-party administrators, pharmacy benefit managers, Medicaid, and Medicare. The APD will build on and enhance existing DOH databases including SPARCS and the Medicaid data warehouse. In the future, the APD may be enhanced with both clinical and public health data sources to further advance its utility.

In New York, there has been a great deal of investment in the Health Information Exchange infrastructure. The Health Care Efficiency and Affordability Law (HEAL) grant program has promoted enhanced interoperability, community-wide Electronic Health Records (EHR) adoption, and expanded care coordination through Health Information Technology. Due to these efforts, standardized health

data is becoming readily available. The vision for the APD is to continuously enhance data capabilities, and begin to include both clinical and public health data sources to further advance its utility.

It is anticipated that the APD will begin as a central clearinghouse that will include comprehensive claims data from commercial and government sources. The central clearinghouse will later be linked to other data sources including lab, pharmacy and clinical data from electronic health records and data contained within public health registries such as the New York State Cancer Registry. The APD data will be made available to users through data marts and cubes that will support the needs of various stakeholders in realizing the different use cases. Data users will view the data as one set of information, whether it contains data from one or multiple sources.

The APD will be an integral component of the Health Benefits Exchange's quality rating process and risk adjustment methodology. At a minimum, New York's APD will be designed to:

- Support Exchange requirements, including enhanced risk adjustment for health plans inside and outside of the Exchange;
- Provide the Exchange with information on quality and cost; and,
- Establish data marts designed specifically to assist Department of Financial Services' (DFS) efforts in reviewing and approving premium rate increases by providing valuable comparative information between plans.

### III. APD Objectives

The Department of Health (DOH) has identified high priority use cases that will demonstrate the value of the APD for a wide variety of health care stakeholders. The use cases include health care transformation, comparative effectiveness, quality improvement, improving public health, assessing health care resource needs, and insurance regulation.

A comprehensive APD can serve as a key lever supporting policy and implementation of population health and health care system improvements. The APD will enable the evaluation of critical issues such as regional variations in utilization, quality, and cost. It can also examine the impact of reimbursement methodologies, public health interventions, and health care resources on utilization, quality, outcomes, and/or costs. Comparative effective research can be done more effectively with a more robust data set. Improved public health is a building block to the transformation agenda. There is an urgent need to improve prevention and activate community resources to target problems before they get to the health care system. Controlling health care costs means we need to understand charges and expenditures across payers, providers, and communities. When this data is publicly available, consumers will have the knowledge they need to compare cost and quality for important health care decisions. In addition, feedback to providers can lead to improvement in performance and quality.

The work of the APD will establish a single, integrated, accurate and timely source of NYS health care provider information for use by multiple NYS Health and Human Services agencies, health information exchanges, health care provider and hospital information systems. Linking, integrating, and aggregating disparate sets of health data within the APD requires two critical resources: a master provider index and a master patient index. While this work is critical to the success of the APD, the benefits of the indexes will be propagated throughout New York's health care system.

## B. General Instructions and Response Requirements

### I. General Information

#### 1. Registration of Vendors and Individuals

Vendors and individuals interested in responding to, or receiving updated information related to this RFI must register by sending an email stating your interest in the RFI to the following: [APDRFI@health.state.ny.us](mailto:APDRFI@health.state.ny.us) with the subject line “APD RFI Vendor Registration” no later than August 2, 2012. All pertinent information and updates will be provided only to those registered. The Department of Health is not responsible for failing to inform any parties that are not registered.

#### 2. Submission Requirements and Guidelines

The New York State Department of Health Office for Health Information Technology Transformation (NYS DOH/OHITT) is coordinating responses to this RFI.

In order to facilitate the review of the responses, please provide the information in the exact order as presented in Appendix A. Please use the Response Form Template provided with this RFI, which is a Microsoft Word Document. The answer fields will expand to include entered text as it is filled. Please rename your completed Appendix A with the following naming convention:

**NYS APD RFI\_VENDOR NAME.doc** (.docx format is also acceptable)

Respondents must minimally complete and answer these sections in Appendix A:

Part I: Letter of transmittal

Part II: Executive Summary and Qualifications

Part III: Governance, Technical, and Operational Questions

Section A: Governance Approach

Section B: Project Approach / Operational Transition

Section F: APD Services and Sustainability: Analytics, Policy Reports, Consumer Outputs and Sustainability Models

## Section G: Cost Projections

The Department of Health **will not** evaluate responses that do not address the minimum requirements above.

Respondents should answer all questions in the RFI, in addition to the minimally required ones. If a question cannot be answered, provide a brief explanation as to why the question cannot be answered (e.g., “N/A - function is outside the scope of offering / company experience”).

Except when provided as examples of health care analytics, reports, outputs and consumer products in response to Section F below, pre-printed marketing material and cost information **should not** be included in your response and will not be considered if provided.

Responses must be provided in the format of the provided templates in Appendix A (please use the Microsoft Word Response Form Template that is posted with this RFI). Responses must be limited to no more than 50 (fifty) pages total. The Department of Health **will not** evaluate responses that do not use the provided templates or that exceed 50 pages total.

Responses must be submitted by email to the following: [APDRFI@health.state.ny.us](mailto:APDRFI@health.state.ny.us) with the subject line “APD RFI Vendor Responses”.

### 3. Purpose and Question Period

This RFI solicitation requests your input and feedback for information purposes only. This RFI will not result in an award. The information provided in your response will be taken into consideration as DOH determines how best to proceed with providing the most cost effective and efficient All Payer Database solution. Please note that the Department of Health is most interested in responses and recommendations based on actual experience.

Vendors must submit any and all questions in the format provided in Appendix G titled “NYS APD Vendor Questions Template”. The Vendor Questions Template is also available in a Microsoft Word format. Each question must cite the particular RFI section and page number it refers to. The closing date for the submission of questions is 12 PM EDT, August 2, 2012.

All questions must be submitted to the following mailbox: [APDRFI@health.state.ny.us](mailto:APDRFI@health.state.ny.us) with the subject line “APD RFI Vendor Questions”. Electronic mail is the required method for the submission of questions. No telephone inquiries will be accepted.

It is the Department’s discretion whether to answer some or all questions concerning this RFI. However, consistent and pertinent questions across vendors will be answered and published for all vendors in a timely manner. Any responses to submitted questions will be provided to all parties that have registered an interest using the process described above.

### 4. Informational Meeting

At its own discretion, the Department of Health reserves the right to follow up the receipt of responses from respondents with an open meeting to solicit additional information. If the DOH elects to conduct such a meeting, those submitting timely responses to this RFI will be notified in writing of the details of the meeting.

## 5. Response Timeline

**Response Due Date:** Responses to this RFI must be received **no later than 12PM EDT September 6, 2012.** Responses or amendments to responses received after the due date and time may not be considered in the process.

Responses must be submitted by email to the following: [APDRFI@health.state.ny.us](mailto:APDRFI@health.state.ny.us) with the subject line "APD RFI Vendor Responses".

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APD RFI Released	July 26, 2012
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## 6. General Terms

1. DOH will not be liable for any costs of work performed in the preparation and production of any RFI response. By submitting a response, the respondent agrees not to make any claims for, or have any right to, damages because of any misunderstanding or misrepresentation of the specifications, or because of any misinformation or lack of information. The responses shall become the property of the New York State Department of Health.

2. This RFI is being issued for data gathering purposes only, and as a result a response does not bind or obligate the responder or the Department of Health to any agreement of provision or procurement of products referenced. No contract can or will be awarded based on submissions.

3. This RFI does not fall under the requirements of State Finance Law §§139-j and 139-k (the Procurement Lobbying Law) and there is no restricted period. However, we ask that you direct your questions and responses in writing to designated email address referenced above in section B.I.2.

4. Freedom of Information Law and RFI Responses



a) The purpose of New York State's Freedom of Information Law (FOIL), which is contained in Public Officers Law Sections 84-90, is to promote the public's right to know the process of governmental decision making and to grant maximum public access to governmental records.

b) Thus, a member of the public may submit a FOIL request for disclosure of the contents of the responses submitted to the State in response to this RFI. The responses of respondents are subject to disclosure under FOIL. However, pursuant to Section 87(2)(d) of FOIL, a State agency may deny access to those portions of responses which "are trade secrets or submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Please note that information which you may claim as proprietary, copyrighted or rights reserved is not necessarily protected from disclosure under FOIL.

c) If there is information in your response which you claim meets the definition set forth in Section 87(2)(d), you must so inform us in a letter accompanying your response.

5. The Department of Health reserves the right to:

a) Postpone or cancel this RFI upon notification to all RFI respondents.

b) Amend the specifications after their release with appropriate notice to all RFI respondents.

c) Request RFI respondents to present supplemental information clarifying their responses, either in writing or in formal presentation.

6. The Department of Health may pursue procurement for services that support the information requested in this RFI. The information gathered from responses to this RFI may be used by the DOH to develop an RFP or pursue procurement, although no guarantee can be made that any such funding request will be issued. This RFI is not a solicitation for proposals.

7. This RFI is non-exclusive. The Department of Health may, in its sole discretion, award other contracts to other vendors for services, deliverables or projects additional or related to the services, deliverables, and projects discussed in the RFI. Responders will fully cooperate with, and will not interfere with the performance of, such other contracts or vendors.

## C. Scope

- i. The purpose of the All Payer Database project is to establish a set of policies and regulations that will guide the creation and operation of a data platform that integrates health service claims, encounters<sup>1</sup>, and clinical data. The All Payer Database (APD) is envisioned to be an extensible and scalable data analytics platform to support the needs of the healthcare system in New York State. The All Payer Database will collect commercial claims and health facility discharge data and integrate it with other existing data repositories including, but not limited to Medicaid, Medicare, electronic health records, laboratory, and pharmacy data. In order to fully support the business cases of the APD, the APD platform will include enterprise master person and master provider indexes.
- ii. The APD will support several healthcare domain operations, assisting executive management and operational staff in researching, planning, executing, monitoring, and regulating health care reform and health care initiatives in an efficient and cost effective manner. The APD will serve the public interest and be a foundation for the development of analytics, services, and products to all stakeholders in the health care system from the highest level policy maker to the healthcare consumer.
- iii. The list below is intended to represent the types of information that will comprise the APD. It is not intended to guarantee the order of the implementation of the phases, as the Department of Health may adjust the implementation schedule to best meet the needs of New York State.

The APD will be implemented in phases, including the following:

1. Intake of Commercial Claims
  2. Intake of SPARCS (facility discharge data)
  3. Integration of Medicaid and Medicare Data
  4. Integration of Lab and EHR Data (RHIO Data)
  5. Integration of Public Health Repositories (e.g. cancer registry, congenital malformations registry, immunization registry)
- iv. Activities for the first year of the All Payer Database project received some financial support through New York State's Affordable Care Act (ACA) grant to establish a Health Insurance Exchange. To meet its obligations under the grant,

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<sup>1</sup> Encounter data are the records of health care services provided to Medicaid clients paid for by Managed Care Organizations (MCO's).

the initial iteration of the APD must support the enhanced risk adjustment and risk corridor programs required by the ACA. Funding beyond the first year of the APD project is undetermined at this time.

## **D. APPENDIX A: Request for Information Questions / Response Templates**

### **I. Part I: LETTER OF TRANSMITTAL**

Respondent's Name \_\_\_\_\_

Respondent's address \_\_\_\_\_

Date: \_\_\_\_\_

(Respondent's Name) hereby represents and warrants that it has analyzed New York State Department of Health's All Payer Database Request for Information and understands the State's requirements.

Additionally, (Respondent's Name) may be making a number of representations outside of its formal response such as discussions, presentations, demonstrations, sales, or reference material and other information providing interactions. (Respondent's Name) hereby warrants that New York State Department of Health may rely on these and that such representations can be made part of the (Respondent's Name) response to the RFI.

Participants in the preparation of this response are:

Participant's name: \_\_\_\_\_

Participant's address: \_\_\_\_\_

Participant's phone/fax numbers: \_\_\_\_\_

Participant's email address: \_\_\_\_\_

Respondent's Signature: \_\_\_\_\_

## II. Part II: EXECUTIVE SUMMARY AND QUALIFICATIONS

### **Executive Summary and Qualifications**

Please provide answers, in the space provided, to the following questions.

1. Provide a clear and concise summary of your qualifications and experience as it relates to this project.

2. Provide a clear identification and description of your organization.

3. Provide a brief explanation of your interest in this project.

### **III. Part III: GOVERNANCE, TECHNICAL, AND OPERATIONAL QUESTIONS**

The effective governance of the APD is critical to its success. The set of APD stakeholders is large and diverse and their engagement in the governance process is critical to ensuring the APD continues to provide value over time. The Department of Health wants to ensure the governance process is effective in managing the APD stakeholders and in developing the rules and discipline required to ensure that the public interests are placed above proprietary interests in the operation of the APD. To that end, the Department of Health proposes two alternate models for the governance and operations of the All Payer Database. In one model, Model A, the Department of Health directly interfaces with the APD stakeholders, business partners, and operational teams.

In the alternate model, Model B, the Department of Health contracts with a not-for-profit organization that manages the governance process and operations of the APD, at the direction of New York State. This public-private partnership provides New York State with a single point of contact for the APD stakeholders, business partners, advisory groups, and operational teams. The not-for-profit organization is responsible for the managing the governance and operations of the APD as directed by the Department of Health.

The two models and a high level description of the APD teams and groups comprising those models are in Appendix B, below.

The Department of Health is seeking input on the models and recommendations on the implementation or modification of those models. In your response, please consider all aspects of governance and operations including regulatory and organizational relationships, roles and responsibilities of NYSDOH, roles and responsibilities of the not-for-profit organization, policy and decision making processes, and the roles and responsibilities of stakeholders, business partners, data contributors, data users, and other participants in the governance and operational models.

It is important to note that in any governance model proposed or implemented for the APD, per the enabling legislation, the Department of Health has ownership of and responsibility for managing the information and data in the system. This includes ensuring confidential information is adequately secured and that is released only when permitted under applicable laws, regulations, and policies. Recommendations for governance of the APD must provide NYSDOH the appropriate authority to carry out its responsibilities for collecting, securing, managing and releasing the data.

#### **1. Section A: Governance Approach**

**Section A: Governance Approach**

Please provide answers, in the space provided, to the following questions.

A1. Please evaluate the models, specifically identifying benefits and challenges in each. Which model would you recommend as the most effective for governing the APD and ensuring its operations serve the public interests? Would you modify any component of the models? Please give reasons for your recommendations and modifications. Cite specific experiences you have had which support your recommendations.

A2. Describe how you would implement the governance and operations models you recommend (give examples as needed). What recommendations would you make for Board structure, membership, and size? Please identify specific benefits and challenges you expect in your implementation approach. How would you address the challenges you identified? Please estimate the numbers and types of resources necessary to support your recommendations.

A3. Describe how you would involve relevant stakeholders including consumers and providers of data, advocates, and other stakeholders in the governance process.

A4. Reference any studies, reports, articles, fact sheets or **preferably, your specific experiences** that support your recommended model and / or approach. Where appropriate, include links to referenced documents.

A5. Identify best practices being employed in New York and other states that might impact your recommended approach and implementation strategies.

A6. Identify trends in public policy and healthcare services delivery that may affect your recommended approach. Include both national and state trends.

A7. Describe the methodology you would use to evaluate the effectiveness of the governance model and the approach used to implement it.



## 2. Section B: Project Approach / Governance and Operational Transition

<b>Section B: Project Approach / Operational Transition</b> Please provide answers, in the space provided, to the following questions.
B1. If you recommend a public-private partnership for the governance and operations of the APD, describe the approach you would use to transition the governance from the model in which New York State manages the governance directly (Model A).
B2. Describe the approach you would use to transition the operations of the APD from New York State. Describe the approach you would use to expand the functionality of the APD by incorporating the collection of discharge and other data and the integration of data repositories as indicated in the conceptual technical architecture diagram in Appendix C, below. Consider that the APD functionality must remain available through the transition period. Give examples as needed.
B3. Reference any studies, articles, or reports, <b>or preferably, your specific experiences</b> that support your recommended approach. Where appropriate, include links to referenced documents.
B4. Identify best practices being employed in New York and other states that might impact your recommended approach and implementation strategies.
B5. Identify organizational transformations being implemented in New York State government that might impact your recommended approach and implementation strategies.
B6. Identify trends in public policy and healthcare services delivery that may affect your recommended approach. Include both national and state trends.
B7. Describe the method you would use to determine the cost of carrying out the transition from New

York State sponsored and operated to a public private partnership.

B8. Provide recommended timelines for transitioning the operations of the APD and for the phased extension of the APD functionality. Identify tasks, resources - including New York State resources, and estimated start and completion dates.

### 3. Sections C and D: APD Operations and Data Governance

New York's All Payer Database (APD) will receive claims data from payers and discharge (SPARCS) data from facilities. It will also integrate data from external sources including Medicaid, Medicare, public health repositories and RHIO's<sup>2</sup> (laboratories, electronic health records). The APD system will integrate and aggregate that data in an optimum manner and create data marts with open application programming interfaces (API's) to support output data requirements. The APD system will also provide enterprise Master Person and Master Provider index capabilities to identify patients and providers across time and data sets.

The APD must also adequately secure confidential data and must provide DOH the authority and capabilities needed to meet its responsibilities for data governance.

The system will need to provide for the following functionality:

#### Security

- Encryption of data in motion and at rest in compliance with the HITECH Act
- Encryption of data during transmission employing FIPS 140-2 compliant cryptographic controls in accordance with NIST Special Publication 800-52
- Encryption of data at rest in accordance with NIST Special Publication 800-111
- Secure automated transfer of data from submitters to the APD
- Standards and role based security implemented throughout the architecture, to restrict access to the data at the system, database, application, and web interface. For example, the general public would have limited ability to filter data whereas a government agency may have the ability to load different datasets and perform more advanced queries of the data. Note that security will need to be applied at the data element level to protect sensitive information such as social security or medical record numbers.
- HIPAA complaint audit trails for user access to Personally Identifiable Information
- The implemented system and all related vendor operations must be fully HIPAA compliant

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<sup>2</sup> A RHIO is a non-governmental organization that exists as a New York State not-for-profit corporation to enable interoperable health information exchange via a common Statewide Health Information Network for New York (SHIN-NY) by participating in setting information policies through a statewide policy framework and governance process, implementing policies and ensuring adherence to such policies with a mission of governing its use in the public's interest and for the public good to improve health care quality and safety and reduce costs. To fulfill this mission, RHIOs require commitment from multiple health care stakeholders in a geographic region, including physicians, hospitals, long term care and home care providers, patients, insurers, purchasers and government. RHIOs are responsible for enabling interoperability through which individual stakeholders are linked together – both organizationally and technically through the SHIN-NY – in a coordinated manner for health information exchange and quality and population health reporting.

## Operational Requirements and APD Capabilities

- Processing of datasets against data validation criteria and generation of electronic messaging to status and report on submitted/processed datasets.
- A method for onboarding of data submitters to ensure that datasets are capable of meeting established field and record level validation checks, and that datasets can be successfully transmitted in a secure fashion.
- A method for ongoing maintenance and review of monthly data updates with the goal to achieve first pass dataset submissions for each submitter of data to the APD.
- Timely, monthly feedback reports for the data submitters
- Loading data into a data warehouse and performing additional record level and statistical error checking. Processes and resources for addressing the results.
- An enterprise master person index for identifying patients across records, data sets, and time
- An enterprise master provider index for identifying providers across records, data sets, and time
- Open service interfaces to the eMPI (enterprise Master Person and Master Provider Index) functionality and databases
- The aggregation of fully validated data into data marts that support desired reporting outputs and data confidentiality requirements.
- Episode grouping technology that organizes claims and discharge data into a set of clinically coherent episodes.
- Capacity to aggregate claims into inpatient stays and apply DRG groupers
- Add geocoding to claims and member eligibility files
- Ability for data submitters to securely review datasets after they have been aggregated to validate that report outputs accurately represent the data they have submitted.
- In data marts where de-identification is required, the de-identification of validated data based on established specifications and the loading of de-identified data into tables available for analytical report development and production. When de-identification is required, the de-identified data shall be in compliance with HIPAA in that no Personally Identifiable Information exists in the de-identified data.
- Pseudo-anonymization services, such that de-identified data may contain a pointer back to identified data for the purposes of data analysis
- The provision of analytical processing tools that allow data to be further aggregated, and the representation of the resulting data in tabular, graphical and other instructive report formats
- Web interfaces to facilitate the submission of data by submitters
- Web interfaces to facilitate the review of data by providers to validate source data used in developing comparison measures
- Web interfaces, role-based reports and dashboards for monitoring operations, interacting with data submitters and users, and ensuring compliance with APD regulations
- Risk adjustment or illness burden software tools for analytic datasets
- Web interface for consumers to access developed reports and statistics
- A robust Metadata component that includes a data dictionary and source to target ETL

## Technical Requirements

- An open, standards based architecture, with an API or web services framework that would enable the system to interoperate with a third party identity management tools, such as a Master Patient Index and Provider Directory
- A standards based database that can be queried with SQL
- Detailed system requirements and design documentation
- NYS DOH applications are deployed in an n-tier architecture with firewalls segregating the tiers.

The APD stack will be hybrid including separate layers:

- Transport - SOAP, REST, NHIN Direct and SFTP
- Processing/Transformation – Rhapsody
- Match/De-Duplication – IBM Initiate
- Load(QA/QC) – IBM Quality Stage/SAS
- Data Repository – AWS RDS (Oracle)
- Reporting/Analysis – SAS

Appendix C contains diagrams representing the APD Conceptual Vision, Conceptual Architecture, the Multi-Tier Data Architecture, and the APD Data Flow Diagram.

Considering the security requirements, operational needs and the functionality of the APD, in Sections C and D, below, please recommend strategies, tools, techniques, and processes for operating, securing, and extending the APD platform.

a) *Section C: New York State All Payer Database Operations*

<b>Section C: New York State All Payer Database Operations</b>			
Please list and describe, in the space provided, the tools, techniques, and processes you would recommend to meet the operational requirements of the APD. Consider implementing federal health data standards and models as well as the use of open source tools.			
C1. Physical Integration: Technology for automated, scheduled batch intake of claims and discharge data. List tools and technology to define and implement an APD atomic data warehouse where claims and facility discharge data is received as X.12 transmissions, staged, quality checked, and loaded into the APD atomic data warehouse.	List Tools (Add Rows as necessary) Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
C2. Logical Integration: Technology for scheduled integration of external data repositories (such as Medicaid, Medicare, Lab, EHR) into the APD platform. List Tools, Technology, processes and techniques to	List Tools (Add Rows as necessary) Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools

integrate data, including quality review, harmonization, linking, de-duplication, and matching processes. Consider both data pull and push scenarios.			
C3. List tools and techniques for defining ETL processes for standardizing and integrating external, heterogeneous data. Consider federal health data standards and models.	List Tools Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
C4. List tools, processes, and techniques for data cleansing, harmonization, and quality enhancement.	List Tools Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
C5. List tools and technology to create an integrated views of the data residing in heterogeneous data sources. APD should provide data marts and	List Tools (Add Rows as necessary); Indicate open source tools	Describe Tool Functions and Processes	Describe Techniques and Processes Associated with Tools

cubes that present a single integrated view and query capabilities to access integrated data from the heterogeneous sources. Describe strategies for supporting queries in close-to-real time as well as in delayed fulfillment scenarios.			
C6. List tools and techniques for quality of care monitoring and improvement.	List Tools Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
C7. List tools and technologies that would be used to manage access to data. What processes would you recommend to manage the release of data? How would you prevent unauthorized extractions of confidential data?	List Tools Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
C8. List tools, technologies, and processes that you would use to de-identify data.	List Tools Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools



<p>C9. eMPI: List tools, technologies, and processes to create and maintain a master person index and an master provider index.</p>	<p>List Tools (Add Rows as necessary); Indicate open source tools</p>	<p>Describe Tool Functions</p>	<p>Describe Techniques and Processes Associated with Tools</p>
<p>C10. Describe strategies and processes you would recommend to create and maintain an enterprise master person index. Consider that the eMPI must accommodate newly collected as well as historic data in which the type and completeness of person data will vary. How much accuracy do you estimate the eMPI will achieve using your recommendations? Cite any studies and analysis to support your recommendations and estimates.</p>			
<p>C11. Describe strategies and processes you would recommend to create an enterprise master provider index. Consider that the eMPI must accommodate newly collected as well</p>			

<p>as historic data in which the type and completeness of provider data will vary. How much accuracy do you estimate the eMPI will achieve using your recommendations? Cite any studies and analysis to support your recommendations and estimates.</p>	
<p>C12. Consider that the APD will provide eMPI services. Describe strategies for providing eMPI's for use and incorporation into external datasets, transactions, and / or systems.</p>	
<p>C13. What technical architectural strategies would you use over time to maximize APD scalability, availability and throughput while reducing and / or minimizing infrastructure costs? How would those cost reductions be realized in savings to New York State? Be specific.</p>	
<p>C14. Describe how you would ensure the security and confidentiality of the data in the APD. Specifically what federal security standards would you meet? What techniques would you use to de-identify and protect PHI (protected health information)?</p>	

<p>C15. Describe previous experience with data warehouses, including specific experience with logical data warehouses. Provide sizing (number of records, frequency of reporting and updating) for your relevant experience.</p>	
<p>C16. Describe your experiences with creating and maintaining master person and / or master provider indexes. Note whether your experience includes establishing eMPI's within legacy datasets.</p>	

***b) Section D: Data Governance – Analysis and Data Management for Extending the New York State All Payer Database Platform***

<p><b>Section D: Data Governance – Analysis and Data Management for Extending the New York State All Payer Database Platform</b></p> <p>Please list and describe, in the space provided, the tools, techniques, and processes you would recommend to meet the following data analysis needs. Consider implementing federal health data standards and models as well as the use of open source tools.</p>			
<p>D1. List tools, techniques, and processes for conducting and documenting APD data domain analysis. (Note: For purposes of this RFI, a domain is a specific data domain e.g.</p>	<p>List Tools (Add Rows as necessary); Indicate open source tools</p>	<p>Describe Tool Functions</p>	<p>Describe Techniques and Processes Associated with Tools</p>

<p>Medicare, Electronic Health Records, laboratory, etc.) Identify by role state resources required to participate.</p>			
<p>D2. List tools, techniques, and recommended processes for conducting and documenting APD data and data rules analysis. Identify by role state resources required to participate.</p>	<p>List Tools (Add Rows as necessary); Indicate open source tools</p>	<p>Describe Tool Functions</p>	<p>Describe Techniques and Processes Associated with Tools</p>
<p>D3. List tools and techniques for building, maintaining, and modifying a standard vocabulary and data models for the APD, including development of a comprehensive data glossary and a rules engine. Consider implementing federal health data standards and standard health industry data models.</p>	<p>List Tools (Add Rows as necessary); Indicate open source tools</p>	<p>Describe Tool Functions</p>	<p>Describe Techniques and Processes Associated with Tools</p>
<p>D4. List tools and techniques for data standardization.</p>	<p>List Tools (Add Rows as necessary); Indicate open source tools</p>	<p>Describe Tool Functions</p>	<p>Describe Techniques and Processes Associated with Tools</p>

Consider federal health data standards and models.			
D5. List tools and techniques for mapping APD data assets to the standard vocabulary.	List Tools (Add Rows as necessary); Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
D6. Describe previous experience with analysis and standardization of health data domains.			
D7. Describe your organization's experience in the management of claims data associated with Medicaid and Medicare, demonstrating your organization's ability to understand the unique requirements associated with these datasets			
D8. Describe your organization's experience with health			

datasets (i.e. claims, clinical, electronic health record, public health, federal data, etc.). Please indicate the types of data.	
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**4. Section E: Historic Data Conversion and Migration and ICD – 9 / ICD-10 Transition**

The APD must incorporate over 30 years of historic SPARCS data (available as flat files) into its data warehouse and data marts and at least five years of commercial and Medicaid, Medicare, and Child Health Plus (CHP) claims and encounter data. The migration will need to ensure that the historic SPARCS and claims data is available and integrated with the APD, including the eMPI's. The migration and historic load processes must have minimal impacts on the operational APD.

As part of its APD strategy, the Department of Health will be modifying the reporting requirements for facilities that report SPARCS data. The APD must be able to manage this transition with a minimal amount of disruption to the facilities.

Also, the datasets within the APD will include diagnostic and procedure codes collected under the ICD-9 set of standards. It will need to support the collection of ICD-10 and future standards of coding. The APD must be able to provide longitudinal data marts that provide a consistency of information across multiple standards.

<b>Section E: Historic Data Conversion and Migration and ICD-9 / ICD 10 Strategies</b>			
Please list and describe, in the space provided, the tools, techniques, and processes you would recommend to meet the APD historic data conversion and ICD-9 / ICD-10 support needs. Consider federal health data standards and models as well as the use of open source tools.			
E1. List tools, techniques, and recommended processes for migrating historic claims and SPARCS data into the APD.	List Tools (Add Rows as necessary); Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools

E2. List tools, techniques, and recommended processes for transitioning facilities to reporting data directly to the APD.	List Tools (Add Rows as necessary); Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools
E3. List tools and techniques for handling multiple ICD standards.	List Tools (Add Rows as necessary); Indicate open source tools	Describe Tool Functions	Describe Techniques and Processes Associated with Tools



<p>E4. Describe how you would transition SPARCS facilities to the APD. Consider techniques and processes which minimize impacts to the facilities and the New York State.</p>			
<p>E5. Describe the processes you would recommend to migrate historic SPARCS and claims data into the APD data warehouse. What challenges do you foresee? How would you address those challenges? What processes would you recommend to ensure the quality and accuracy of historic data loaded into the APD? How would you ensure minimal disruption to the operational APD during the conversion process? Consider that the resulting migration must incorporate the eMPI's into the historic data and allow for the linking and matching of SPARCS and claims data in the APD.</p>			
<p>E6. Describe previous experience with the conversion / migration of historic health data.</p>			
<p>E7. Describe the processes and techniques you would recommend to handle the period of transition from ICD-9 to ICD-10.</p>			

<p>What techniques would you use to ensure that the APD can provide analytic datasets that span multiple standards? Consider the use of national standards for mapping equivalencies and other tools.</p>	
<p>E8. Provide recommended timelines for the migration and loading of historic data into the APD and for supporting of ICD-10 standards. Identify tasks, resources - including New York State resources, and estimated start and completion dates.</p>	

**5. Section F: APD Services and Sustainability: Analytics, Policy Reports, Consumer Outputs, and Sustainability Models**

While the APD is envisioned as an extensible data platform, the value of the APD is realized in making that data available as information.

The APD must serve as an information resource to New York State, including policy makers and regulators, researchers, health care providers, health plans, and consumers. The Department of Health is interested in recommendations based on specific experiences in developing products, tools, reports, and analytics using the type of data that the APD will provide.

A major value of the APD is the breadth of the data it will contain across all payers. As a long range goal of the APD is to be self-sustaining, the Department of Health is seeking recommendations on how to leverage the value of the APD in order to achieve self-sustainability. The current parameters in place for assessments relating to the SPARCS system fall under State Finance law Section 97-x, which is included in Appendix F for reference.

**Section F: APD Services and Sustainability: Analytics, Policy Reports, Consumer Outputs, and Sustainability Models**

Please list and describe, in the space provided, the types of analytic tools, web interfaces, open API's, reports, interactive data services, geographic information system (GIS) and dashboards you would recommend making available using the APD as an information resource. Consider the development of products to support consumer education and decision making and the use of information at the community level to improve population health. Consider the development of products to support emerging models of health care service delivery such as health homes and accountable care organizations (ACO's). Consider implementing federal standards for quality measures as well as the use of standard grouping software, geocoding tools, and open source tools.

F1. Type of Product (e.g. web interface, dashboard, report, open API, open source tools such as R and crowdsourcing ideas etc.)	Describe Product Functionality	List Intended Product User(s) (e.g. consumer, insurance regulator, health care provider, physician, public health professional, ACO)
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F2. Describe previous experience with health care data analytics.		
F3. Describe previous experience with developing web-based access to health data.		
F4. Describe previous experience in developing data based products in the public health and or health care sectors. Please demonstrate how your experience is relevant to your list of recommended products in item F1, above.		
F5. What specific recommendations		

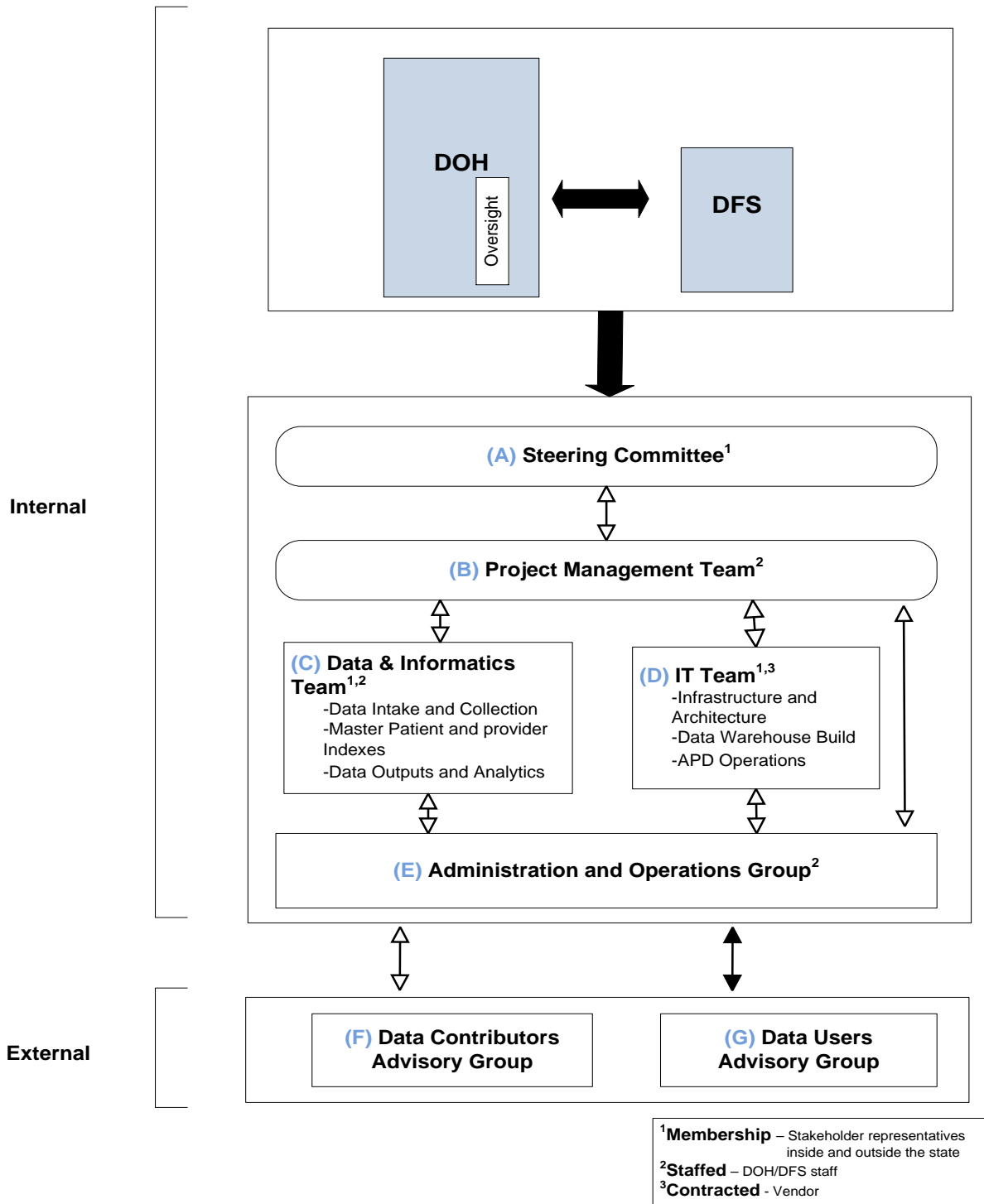
<p>would you make to ensure the APD is self-sustainable? Would you impose fees on organizations that submit data? Would you impose fees for users of the data? Would you offer subscriptions to data or analytic tools? How would you design and price proposed fee or subscription models? Would you develop specific products for sale and use in the health care industry? If so, what would these products be and how would you price them? Be specific and base recommendations on market needs and values.</p>	
<p>F6. Describe your specific experiences and successes in developing products and sustainability models that you recommend for the APD.</p>	

**6. Section G: Cost Projections**

<b>Section G: Cost Projections</b>				
Please indicate your cost and time projections for implementing your recommendations above.				
<b>Section</b>	<b>Time in Months</b>	<b>Hardware Costs</b>	<b>Software Costs</b>	<b>Labor Costs</b>
<b>Section B Project Approach / Operational Transition</b>				
<b>Section C: New York State All Payer Database Operations</b>				
<b>Section D: Data Governance – Analysis and Data Management</b>				
<b>Section E: Historic Data Conversion and Migration and ICD-9 / ICD 10 Strategies</b>				
<b>Section F: APD Services: Analytics, Policy Reports, and Consumer Outputs</b>				
<b>Year 1 Operations and Maintenance</b>				
<b>Year 2 Operations and Maintenance</b>				

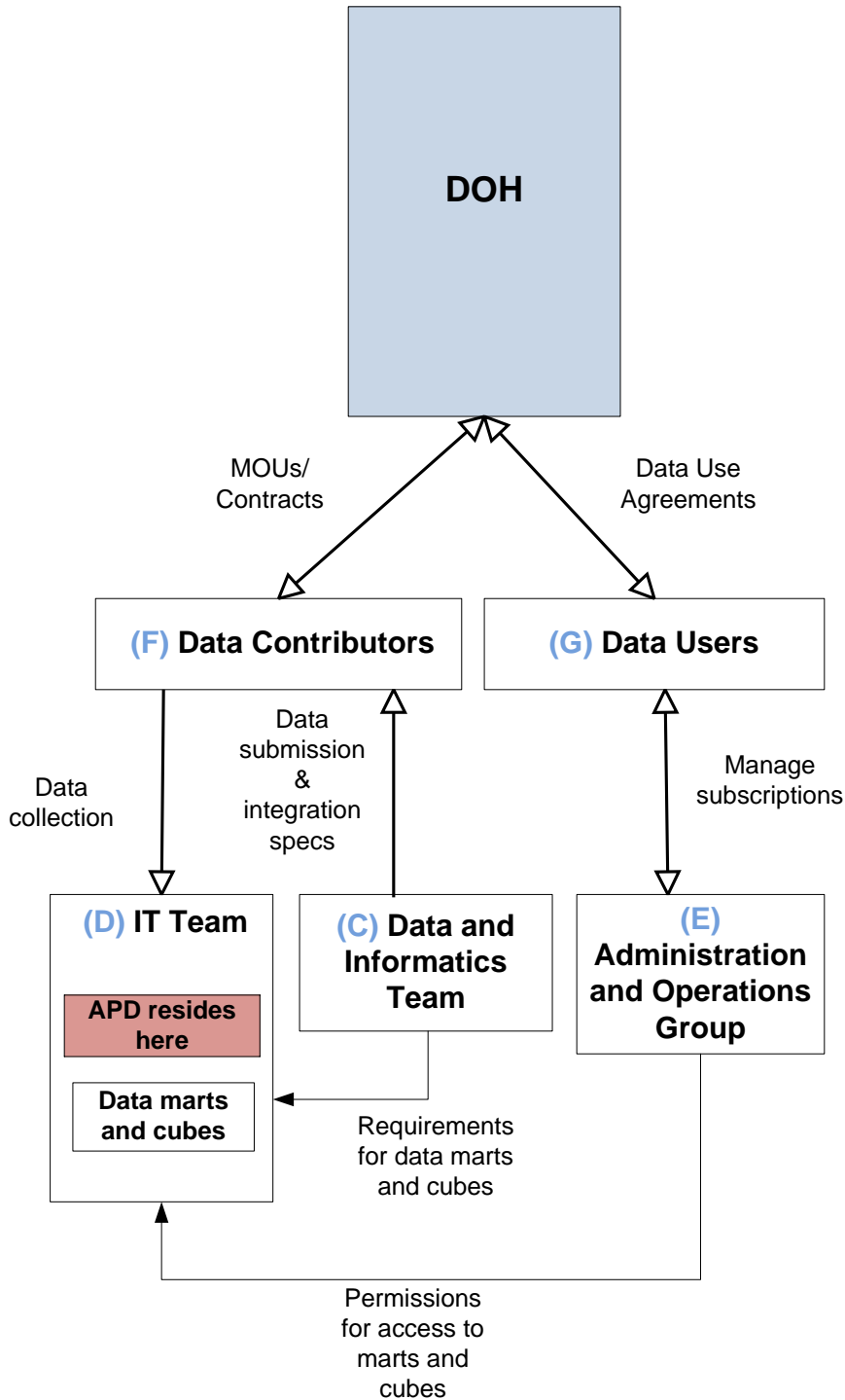
**E. APPENDIX B: Proposed APD Governance and Operational Models**

# All Payer Database Governance Structure Proposed Model A

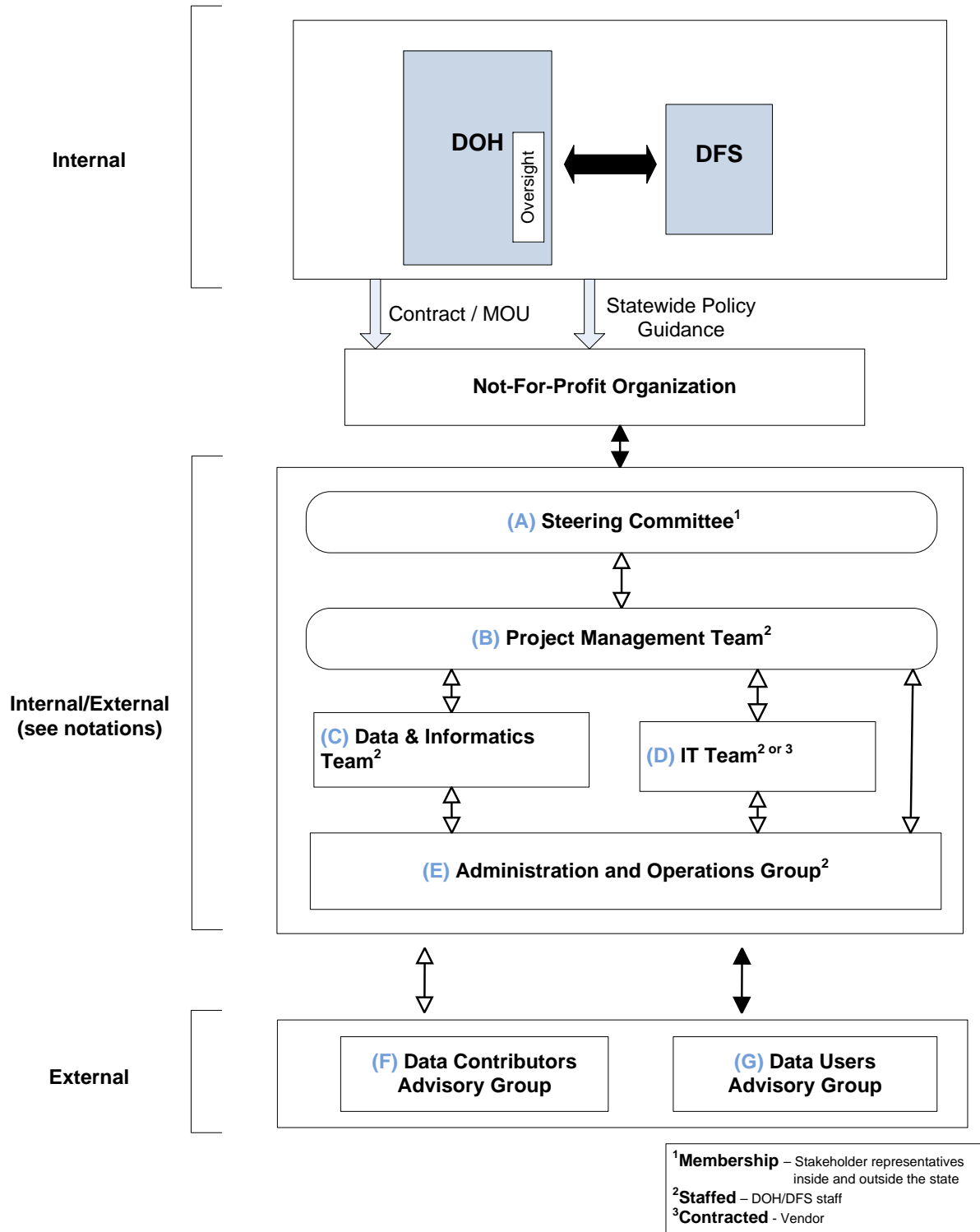




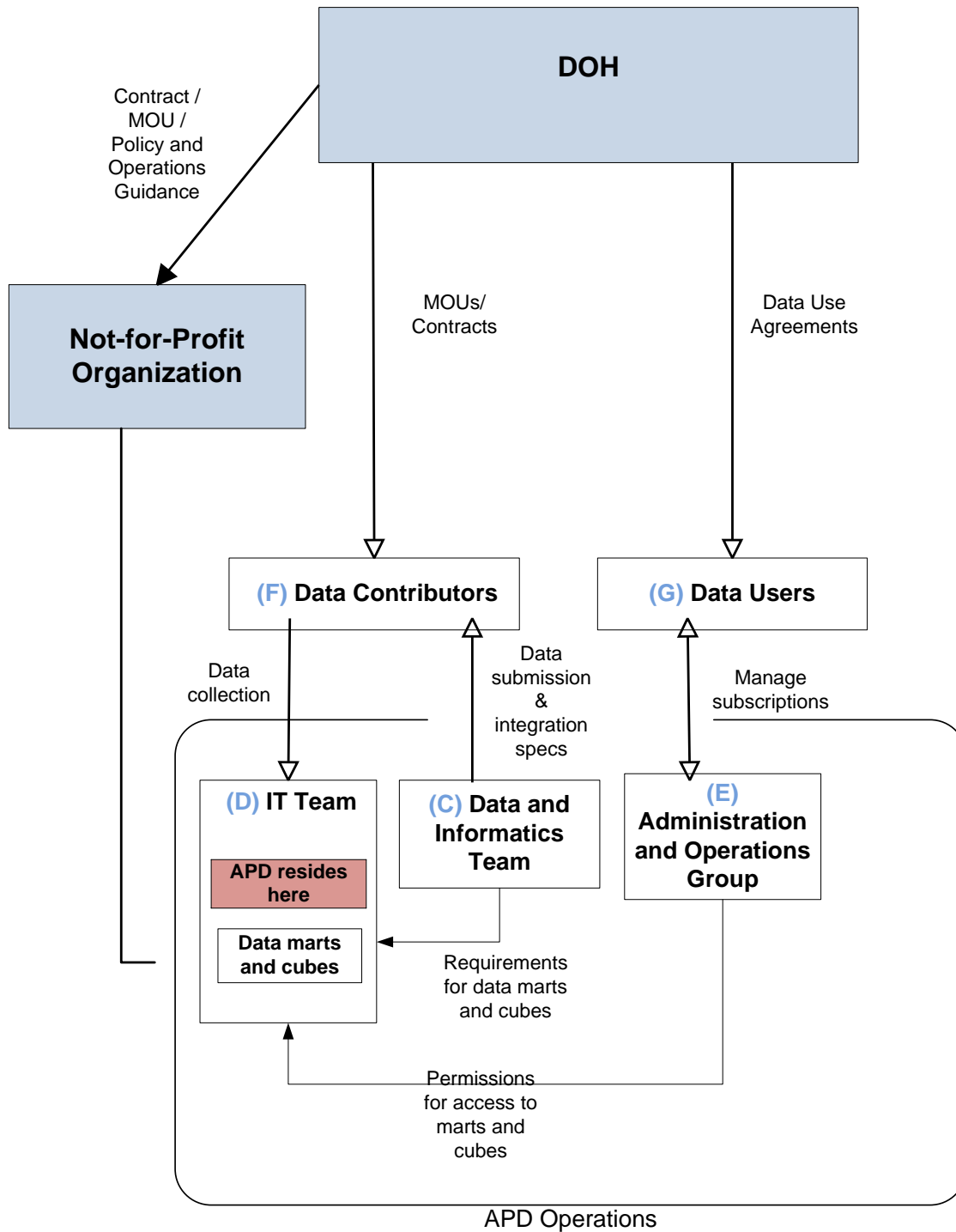
# All Payer Database Operational Model Proposed Model A



## All Payer Database Governance Structure Proposed Model B



# All Payer Database Operational Model Proposed Model B



## I. Roles and Responsibilities of Entities in Governance

### **DOH will:**

- Develop, implement and enforce regulations;
- Identify authoritative sources of national data standards and organizations that will provide basis for NYS standards and policies;
- Determine how DOH data (mainly SPARCS and Medicaid) will be incorporated;
- Work with CMS on access protocols related to Medicare data;
- Develop strategic partnerships to establish APD and build tools for its use, and establish terms for and oversee partner(s) agreements;
- Define how APD will be used to support current and future DOH policy and operating functions (including opportunities to streamline or eliminate redundant systems); and,
- Lead and participate in requirements development with regard to data collection and analysis that will be incorporated into APD design and operation.

### **DFS will:**

- Provide subject matter expertise and assistance to DOH for the regulation of commercial plans;
- Define how APD will be used to support current and future DFS policy and operating functions (including opportunities to streamline or eliminate redundant systems); and,
- Participate in requirements development with regard to data collection and analysis that will be incorporated into APD design and operation.

### **(F) Data Contributors will:**

- Follow data reporting requirements;
- Ensure data quality and incorporate QI feedback into data reporting processes;
- Establish DUAs or permissions with business associates or clients as needed;
- Participate in advisory and work groups; and,
- Participate in/contribute to state and regional collaborative efforts that will advance state health reform and leverage APD.

### **(G) Data Users will:**

- Adhere to data access and use policies based on specified roles and use cases;

- Share reports and analyses, including data QI feedback, using APD to shape future policy and operations; and,
- Create and participate in data users group.

## **II. Project Team Structure**

The APD project will be comprised of teams, workgroups, and private contractors with specific roles and responsibilities. These teams will operate under the leadership of DOH.

### **(A) APD Steering Committee**

The Steering Committee will perform governance functions throughout the life of the project. The Steering Committee is comprised of key representatives from DOH as well as DFS. External stakeholders are included in Steering Committee meetings for major updates on the APD project. This team will:

- Provide resources to the project through membership;
- Assist in the development of contracts, MOU's and other agreements necessary to the success of the project;
- Define success criteria for the APD; and
- Develop sustainability models for the continued operation and improvement of the APD.

### **(B) Project Management Team**

The Project Management Team is responsible for the success of the APD project. The project management team is an internal team functioning within the Department of Health. This team will:

- Develop contracts, MOUs and other agreements necessary to the success of the project;
- Provide oversight to all working teams and committees;
- Develop necessary regulations for the implementation of the APD;
- Develop data use agreements required for access to APD information;
- Create and maintain all project documentation including the project charter, requirements etc.; and
- Organize and facilitate meetings, document meeting minutes and share project updates.

### **(C) Data and Informatics Team**

As the heart of the APD is its data, the Data and Informatics Team will have critical responsibilities in the APD project. This team will be responsible for developing the requirements for data reporting and integration. They will be responsible for ensuring that data access is provided within the parameters of established laws, regulations, and policies.

The Data and Informatics Team is broken into three subgroups: (1) Data Intake and Collection, (2) Master Patient and Provider Indexes, and (3) Data Outputs and Analytics. A separate Data and Informatics team will address historical data conversion issues under the Data Conversion Subproject.

The Data and Informatics Team and its subgroups will:

- Establish data reporting and submission requirements and processes – data elements, submission formats, frequency, methods, thresholds;
- Create data dictionaries for data submitters and data users;
- Define process and requirements for data validation and remediation;
- Define business rules for data stewardship, lineage, etc.;
- Assess and formalize linking, matching and harmonizing algorithms in conjunction with the vendor.
- Develop requirements for establishing master provider and patient indexes;
- Development of models for analytic reporting based on data classification
- Outline strategy for ICD-10 transition;
- Define historic data conversion requirements;
- Define requirements for the various data marts and cubes;
- Implement and oversee compliance with security policies as outlined by the governance team;
- Develop appropriate DUAs for the different levels of access and types of users. Define encryption, redaction, and other techniques to ensure compliance with data security, confidentiality, and data access policies; and,
- Perform data governance functions to improve the quality, usability and value of information delivered to the APD.

### **(D) IT Team**

The IT Team will be responsible for creating, implementing, and operating the APD technical platform. DOH will contract for these services and the contractor will provide staffing to this team. The contractor will also designate a team leader with appropriate

authority to serve as the contact point between the DOH APD Project Manager and the contractor.

The IT Team will be broken into three subgroups: (1) Infrastructure and Architecture, (2) Data Warehouse Build, and (3) APD Operations. A separate IT team will implement historical data conversion under the Data Conversion Subproject.

The IT Team and its subgroups will:

- Work with other teams in the APD project to ensure the technical solution aligns with business and policy requirements;
- Design and build an APD infrastructure which aligns with the State's and DOH's security and technical requirements;
- Adhere to the State's Office of Information Technology Services governance process in making technology and operation support decisions;
- Perform activities related to the APD architecture including logical and physical design: network, database, storage, security, backup and business continuity, etc.;
- Implement and provide the technical execution of requirements developed by the Project Management and Data Teams;
- Create and implement the processes for the intake of claims and discharge data, including QI activities with data submitters;
- Perform activities related to data intake processes, including ETL (extraction, transformation, and load) processes, data harmonization, data integration, etc.;
- Implement the design of the master patient and master provider indexes;
- Provide technical support to administer user management and access control;
- Design and develop the APD atomic data warehouse as well as the various end-user data marts and cubes;
- Make APD information extensible by developing access mechanisms (API's, exposed services, etc.) to the database;
- Ensure that access to the APD database is aligned with regulations, policies, and DUA's; and,
- Develop programs and processes for the conversion and loading of historic data into the APD.

## **(E) APD Administration and Operations Group**

The APD Administration and Operations Group will be responsible for the administration of the APD, including providing operational support to ensure compliance with data submission requirements and data release policies. The APD project will leverage existing

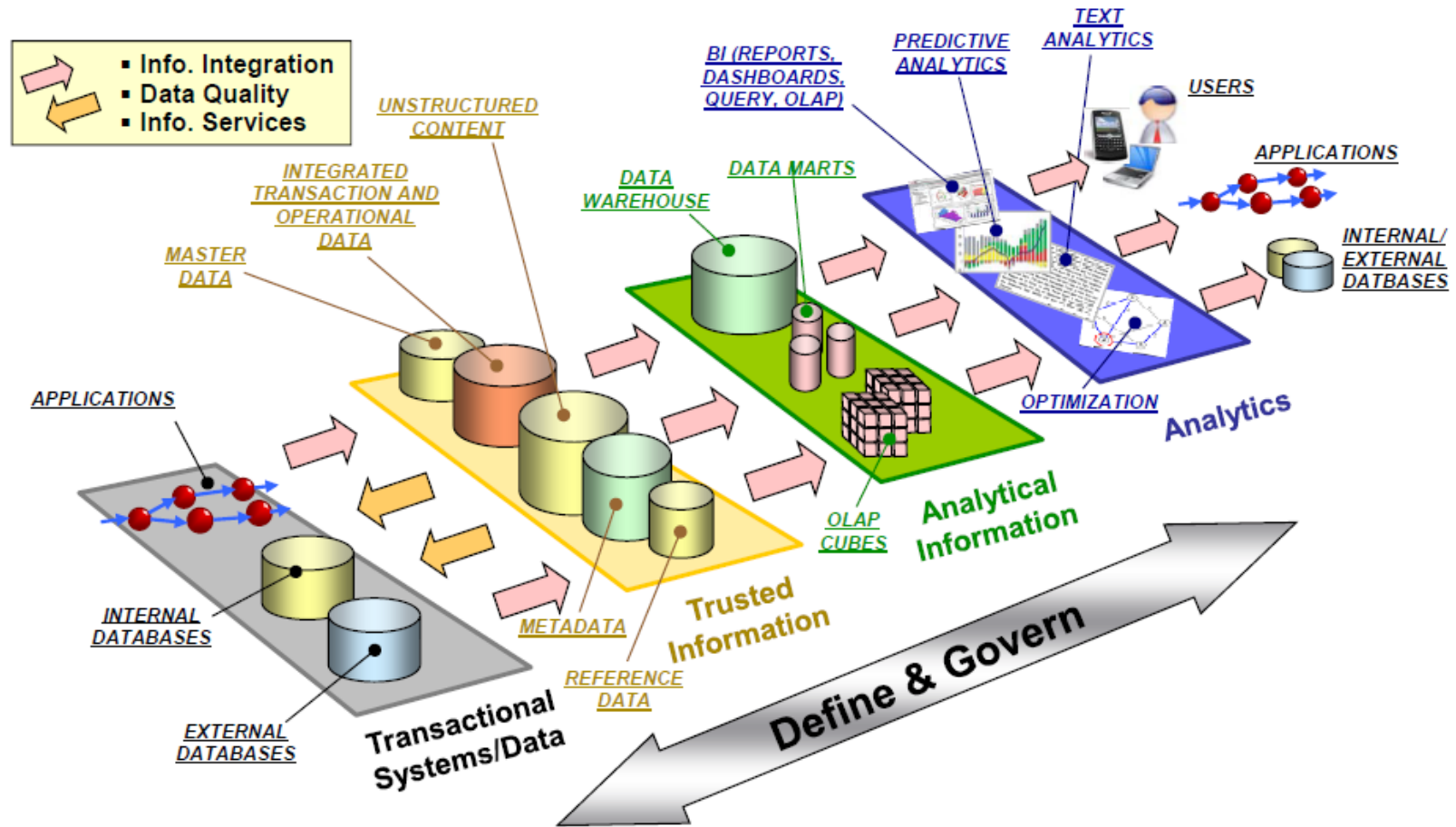
capabilities within DOH by expanding the responsibilities of the current SPARCS administration group to include regulatory oversight for the APD. This group will:

- Provide operational support to ensure compliance with data submissions and data access agreements;
- Design and implement modifications to business processes to support the APD;
- Implement the APD sustainability models designed by the APD Governance and Project Management Team;
- Develop processes for operating fee and payment structures that support the APD;
- Provide an operational contact point for the APD; and,
- Work with the other APD teams to improve the quality, usability, and value of the APD.

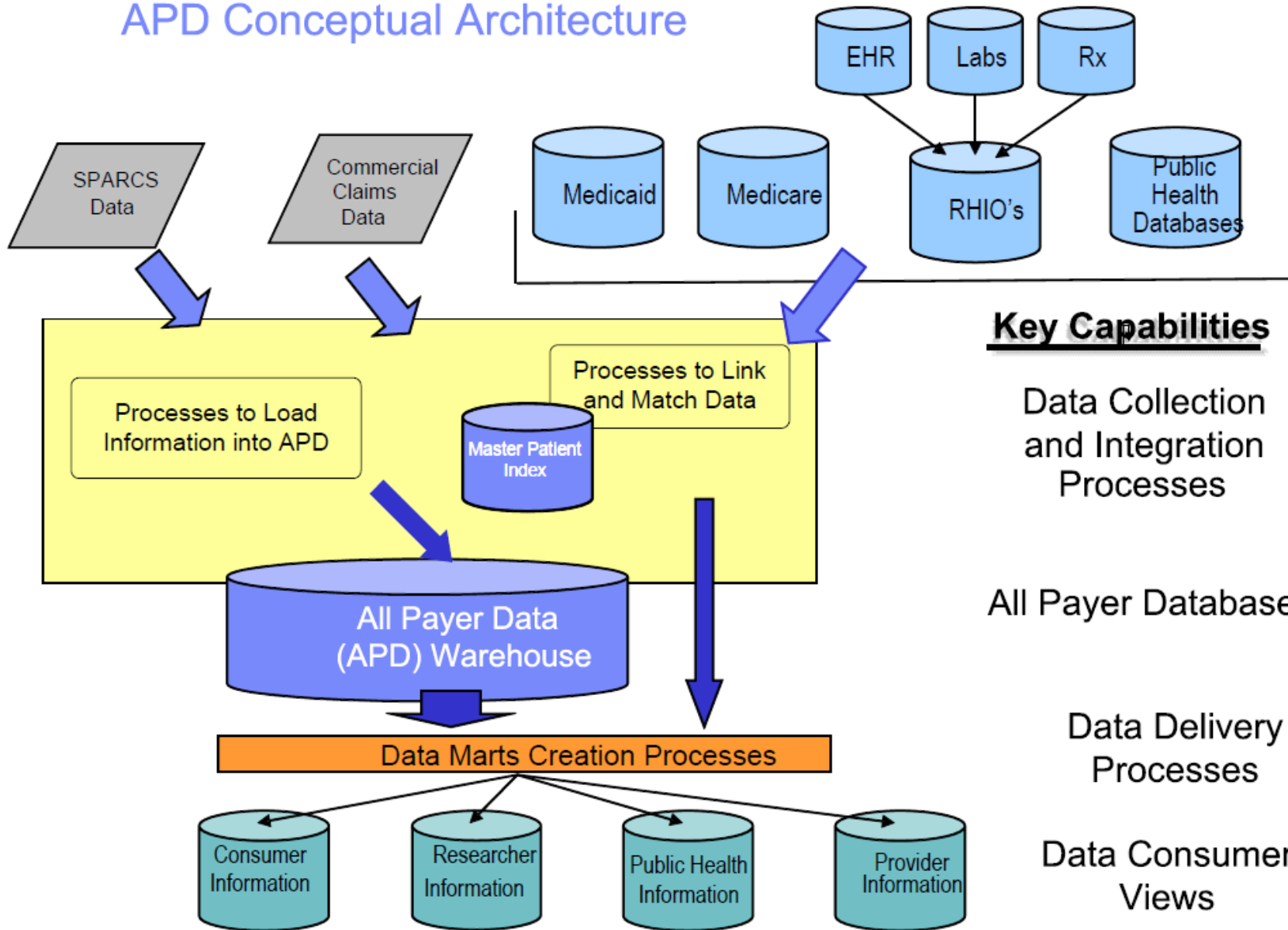


**F. APPENDIX C: TECHNICAL DIAGRAMS**

# APD Conceptual Vision



# APD Conceptual Architecture



## Key Capabilities

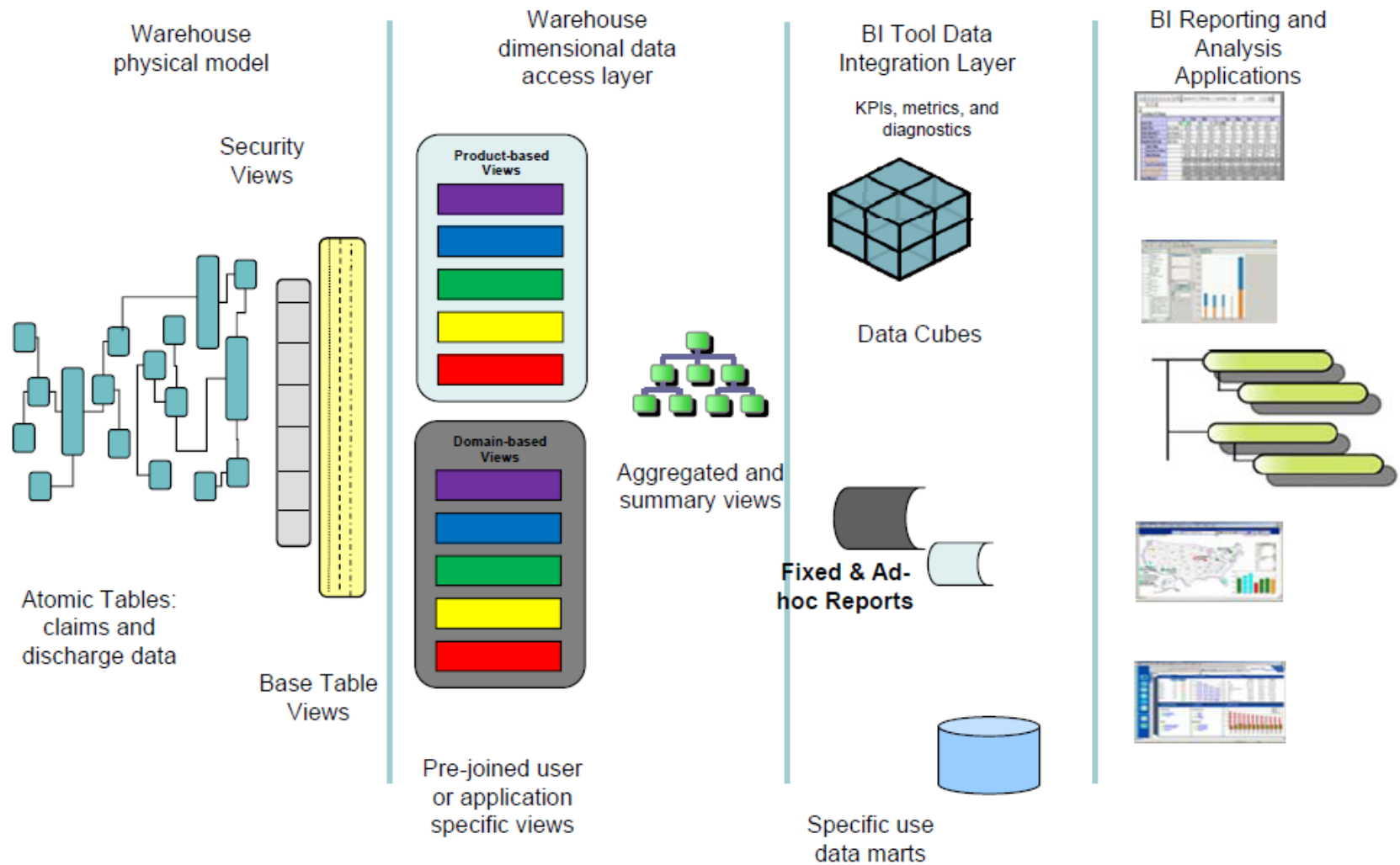
Data Collection and Integration Processes

All Payer Database

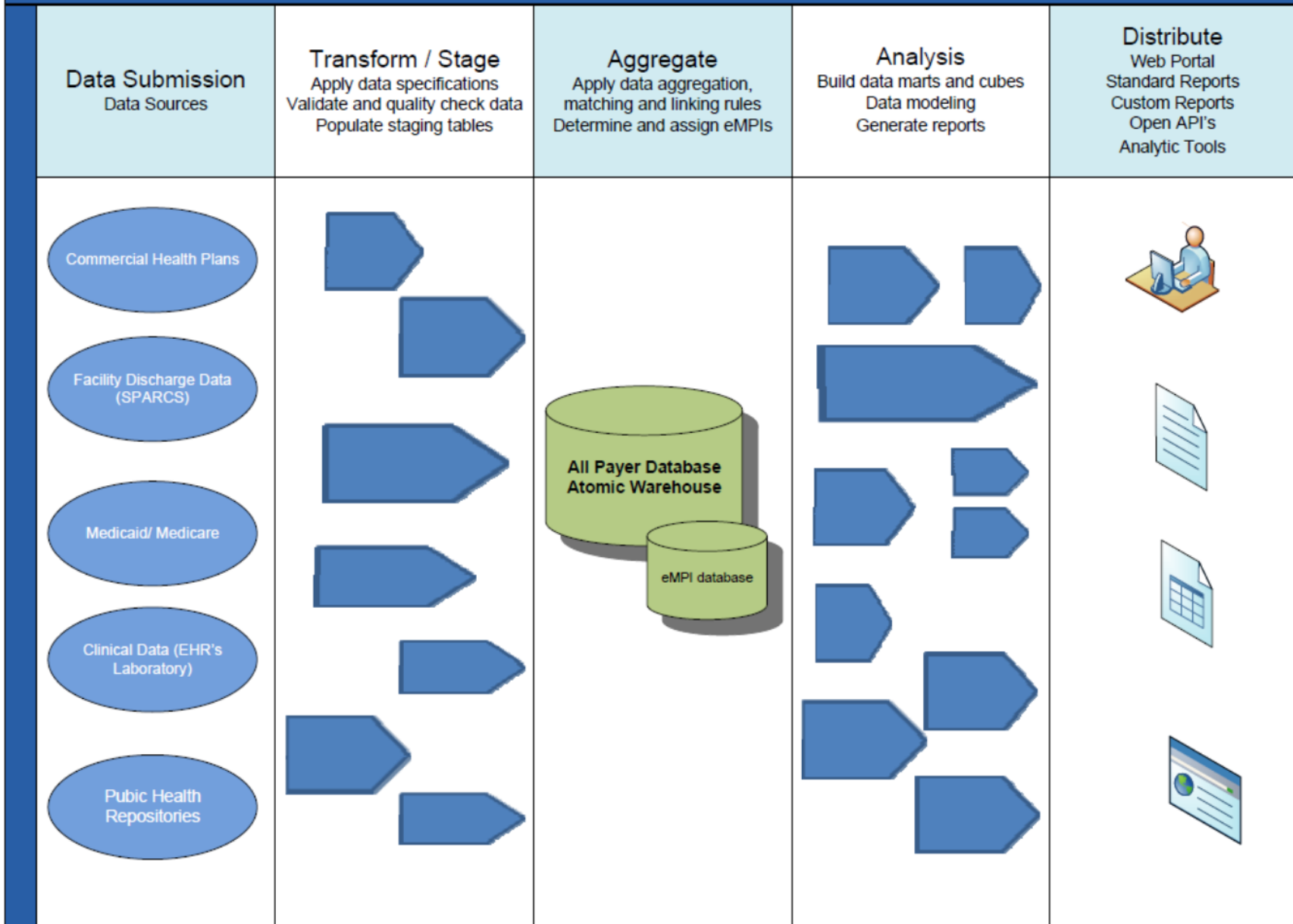
Data Delivery Processes

Data Consumer Views

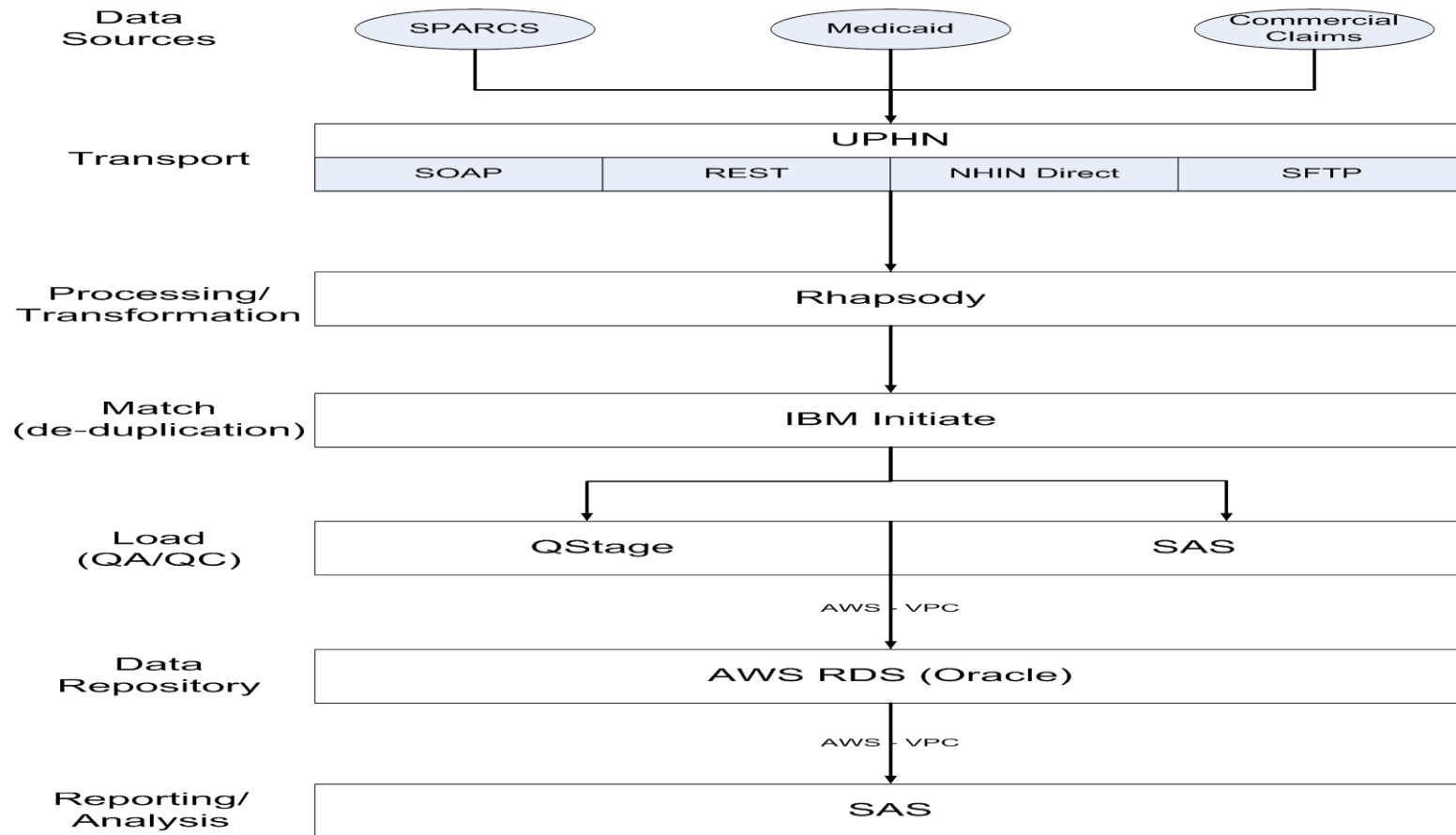
# APD Multi-Tiered Data Architecture



# All Payer Database Dataflow Diagram



## APD - Stack



**G. APPENDIX D: High Level APD Estimated Project Schedules (Phases 1 and 2)**

Note: Click on the first page of the each of the project schedules to view the entire set of activities within each phase.

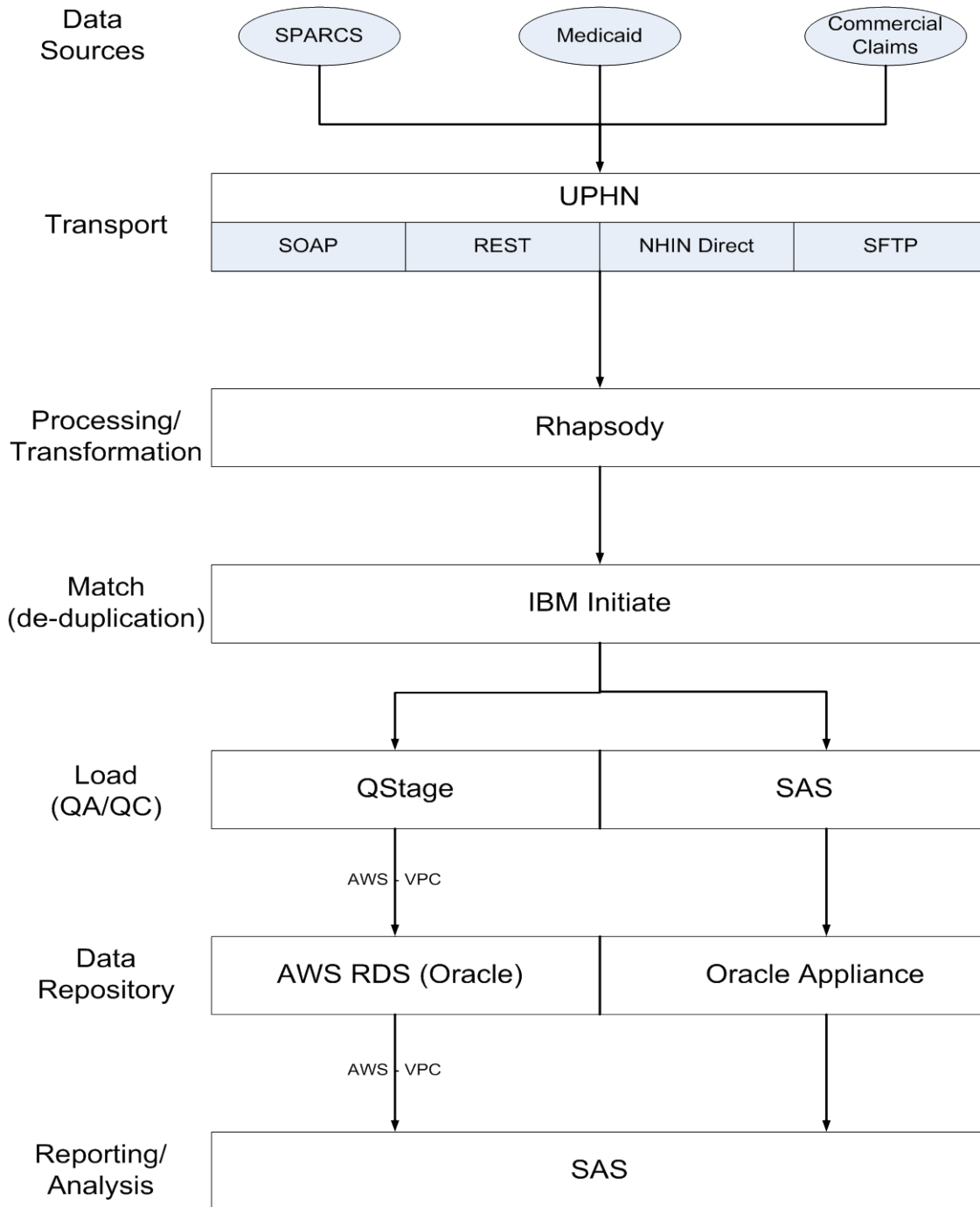
ID	Task Name	Start	Finish	1st Quarter			2nd Quarter	
				Jan	Feb	Mar	Apr	May
1	<b>Project Activities</b>	Tue 1/31/12	Fri 8/2/13					
2	Assign resources to the project	Tue 1/31/12	Mon 4/30/12					
3	Hire APD Staff	Tue 1/31/12	Fri 6/29/12					
4	Solicit and assemble APD Project Teams	Tue 1/31/12	Fri 6/29/12					
5	Develop and maintain project management documentation and reports	Tue 1/31/12	Fri 8/2/13					
6	Review performance period reports as provided by the PM team	Tue 1/31/12	Fri 8/2/13					
7	Define success criteria for the APD	Tue 1/31/12	Fri 5/4/12					
8	<b>Establish Vendor Contract/Determine Procurement Strategy</b>	Mon 3/26/12	Fri 2/8/13					
9	Develop and release RFI	Mon 3/26/12	Fri 6/1/12					
10	Vendors Respond to RFI	Mon 6/4/12	Fri 8/24/12					
11	Review RFI responses	Mon 8/27/12	Fri 10/5/12					
12	Procurement	Mon 10/8/12	Fri 2/8/13					
13	Contract(s) established	Fri 2/8/13	Fri 2/8/13					
14	<b>Policy Issues</b>	Tue 1/31/12	Mon 1/14/13					
15	Develop and review policies governing the APD	Tue 1/31/12	Mon 6/4/12					
16	Develop data governance plan	Tue 1/31/12	Mon 6/4/12					
17	Draft regulations	Tue 1/31/12	Mon 8/27/12					
18	Public comment for regulations	Tue 8/28/12	Mon 11/19/12					
19	Finalize regulations	Tue 11/20/12	Mon 12/31/12					
20	Define data release and data use policies (align with Metrix)	Tue 1/31/12	Tue 1/31/12					
21	Develop and finalize contracts, MOUs, and other necessary agreements	Tue 1/31/12	Mon 1/14/13					
22	<b>Commercial Claims Analysis</b>	Mon 4/30/12	Mon 7/23/12					
23	Identify data submission requirements	Mon 4/30/12	Fri 6/1/12					
24	Define quality processes for data validation and remediation	Mon 6/4/12	Fri 6/22/12					
25	Identify supporting tables needed for clearinghouse	Mon 6/25/12	Fri 6/29/12					
26	Review of Intake requirements and processes	Mon 7/2/12	Fri 7/13/12					
27	Finalize reporting and submission requirements processes and documentation for Submission Guide	Mon 7/16/12	Mon 7/23/12					
28	Commercial Claims Submission Guide Released	Mon 7/23/12	Mon 7/23/12					
29	<b>Master Patient and Master Provider Analysis</b>	Mon 4/30/12	Fri 7/20/12					
30	Develop data requirements for Master Patient Index	Mon 4/30/12	Fri 6/15/12					
31	Develop data requirements for Master Provider Index	Mon 4/30/12	Fri 6/15/12					
32	Incorporate MPI data requirements into Claims Submission Guide	Mon 6/18/12	Fri 6/22/12					
33	Develop MPI algorithms	Mon 6/25/12	Fri 7/6/12					
34	Develop MPI interface requirements	Mon 7/9/12	Fri 7/20/12					
35	MPI Requirements Document completed	Fri 7/20/12	Fri 7/20/12					
36	<b>Data Release and Use Analysis</b>	Mon 4/30/12	Fri 8/10/12					
37	Identify specific Phase 1 use cases for data marts and cubes	Mon 4/30/12	Fri 5/4/12					
38	Identify data required to support Phase 1 use cases	Mon 5/7/12	Fri 5/18/12					
39	Identify Phase 1 analytic reports	Mon 5/21/12	Fri 5/25/12					
40	Identify data required to support Phase 1 analytics	Mon 5/28/12	Fri 6/8/12					
41	Incorporate data requirements into Claims Submission Guide	Mon 6/11/12	Fri 6/15/12					



ID	Task Name	Start	Finish	1st Quarter			2nd Quarter			3rd Quarter
				Jan	Feb	Mar	Apr	May	Jun	Jul
1	<b>SPARCS Analysis</b>	<b>Tue 7/24/12</b>	<b>Mon 8/27/12</b>							
2	Identify data submission requirements	Tue 7/24/12	Mon 8/27/12							
3	Incorporate MPI data requirements into SPARCS submission Guide	Tue 7/24/12	Tue 7/24/12							
4	Incorporate data elements needed to link claims with SPARCS	Wed 7/25/12	Wed 7/25/12							
5	Define quality processes for data validation and remediation	Thu 7/26/12	Wed 8/15/12							
6	Identify supporting tables needed for clearinghouse	Thu 8/16/12	Wed 8/22/12							
7	<b>Master Patient and Master Provider Analysis</b>	<b>Tue 10/23/12</b>	<b>Mon 10/29/12</b>							
8	Determine modifications necessary to support SPARCS	Tue 10/23/12	Mon 10/29/12							
9	Requirements Document revised with SPARCS needs	Mon 10/29/12	Mon 10/29/12							
10	<b>Data Release and Use Analysis</b>	<b>Mon 8/13/12</b>	<b>Fri 11/23/12</b>							
11	Identify specific Phase 2 use cases for data marts and cubes	Mon 8/13/12	Fri 8/17/12							
12	Identify data required to support Phase 2 use cases	Mon 8/20/12	Fri 8/31/12							
13	Identify Phase 2 analytic reports	Mon 9/3/12	Fri 9/7/12							
14	Identify data required to support Phase 2 analytics	Mon 9/10/12	Fri 9/21/12							
15	Incorporate data requirements into SPARCS Submission Guide	Mon 9/24/12	Fri 9/28/12							
16	Define encryption, redaction, and other techniques to ensure compliance with security, confidentiality, and data access policies	Mon 10/1/12	Fri 10/19/12							
17	Define open APIs for access to data marts	Mon 10/22/12	Fri 11/2/12							
18	Requirements document for Phase 2 data marts (use cases, analytics including rate setting and risk adjustment)	Fri 11/2/12	Fri 11/2/12							
19	Identify and Design Phase 2 consumer products	Mon 11/5/12	Fri 11/23/12							
20	Requirements document for Phase 2 Consumer Products	Fri 11/23/12	Fri 11/23/12							
21	<b>SPARCS Analysis</b>	<b>Mon 10/1/12</b>	<b>Mon 10/22/12</b>							
22	Review of Intake requirements and processes	Mon 10/1/12	Fri 10/12/12							
23	Finalize reporting and submission requirements processes and documentation for Submission Guide	Mon 10/15/12	Mon 10/22/12							
24	SPARCS Submission Guide Released	Mon 10/22/12	Mon 10/22/12							
25	<b>APD Administration Analysis and Design</b>	<b>Tue 10/23/12</b>	<b>Mon 1/21/13</b>							
26	Modify operational processes and workflow to incorporate SPARCS	Tue 10/23/12	Mon 11/12/12							
27	Modify operational processes and workflow for providing access to data marts	Tue 11/13/12	Mon 12/10/12							
28	Design operation and production reports	Tue 12/11/12	Mon 1/21/13							
29	APD Administration and Operations Requirements Document	Mon 1/21/13	Mon 1/21/13							
30	<b>Software Development: SPARCS Intake</b>	<b>Wed 4/17/13</b>	<b>Thu 10/10/13</b>							
31	Build SPARCS Intake processes	Wed 4/17/13	Tue 7/23/13							
32	Test Intake processes in dev environment (alpha test)	Wed 7/24/13	Tue 8/20/13							
33	Promote to QA environment	Wed 8/21/13	Wed 8/21/13							
34	Beta test Intake processes in QA environment	Thu 8/22/13	Wed 10/9/13							
35	Promote to production environment	Thu 10/10/13	Thu 10/10/13							
36	<b>Software Development: Atomic Data Warehouse</b>	<b>Wed 4/17/13</b>	<b>Tue 12/24/13</b>							
37	Modify atomic data warehouse in dev environment	Wed 4/17/13	Tue 7/9/13							
38	Test warehouse in dev environment (alpha test)	Wed 7/10/13	Tue 8/6/13							
39	Modify atomic data warehouse in QA environment	Wed 8/7/13	Tue 8/13/13							
40	Test warehouse in QA environment (beta test)	Wed 8/14/13	Tue 12/17/13							

## H. APPENDIX E: New York State and Department of Health Architecture and Data Center Assets and Standards

### APD - Stack



## **I. Appendix F: Public Health Law Section 2816 and State Finance Law Section 97-x**

### **Public Health Law Section 2816**

\* § 2816. Statewide planning and research cooperative system. 1. (a)

The statewide planning and research cooperative system in the department is continued, as provided in and subject to this section, within amounts appropriated for that purpose. The system shall be developed and operated by the commissioner in consultation with the council, as may be specified by regulation of the commissioner. Any component or components of the system may be operated under a different name or names, and may be structured as separate systems. In making regulations under this section, subsequent to April first, two thousand eleven, the commissioner shall consult with the superintendent of financial services or the head of any agency that succeeds the department of financial services, health care providers, third-party health care payers, and advocates representing patients; protect the confidentiality of patient-identifiable information; promote the accuracy and completeness of reporting; and minimize the burden on institutional and non-institutional health care providers and third-party health care payers.

(b) As used in this section, unless the context clearly requires otherwise:

(i) "Health care" means any services, supplies, equipment, or prescription drugs referred to in subdivision two of this section.

(ii) "Health care provider" includes, in addition to its common meanings, a clinical laboratory, a pharmacy, an entity that is an integrated organization of health care providers, and an accountable care organization of health care providers.

(iii) "System" means the statewide planning and research cooperative system under this section, and any separate system under this subdivision.

(iv) "Third-party health care payer" includes, but is not limited to, an insurer, organization or corporation licensed or certified pursuant to article thirty-two, forty-three or forty-seven of the insurance law, or article forty-four of the public health law; or an entity such as a pharmacy benefits manager, fiscal administrator, or administrative services provider that participates in the administration of a third-party health care payer system.

(v) "Covered person" is a person covered under a third-party health care payer contract, agreement, or arrangement.

2. Notwithstanding any provision of law to the contrary, regulations governing the system shall include, but not be limited to, the following:

(a) Specification of patient, covered person, claims, and other data elements and format which shall be reported including data related to:

- (i) inpatient hospitalization data from general hospitals;
- (ii) ambulatory surgery data from hospital-based ambulatory surgery services and all other ambulatory surgery facilities licensed under this article;

(iii) emergency department data from general hospitals;

(iv) outpatient, clinical laboratory, and prescription data, including but not limited to data from or relating to services, supplies, equipment, and prescription drugs provided or ordered by general hospitals and diagnostic and treatment centers licensed under this article, pharmacies, clinical laboratories, and other health care providers;

(v) covered person and claims data; and

(vi) the data specified in this paragraph shall include the identification of patients transferred, admitted or treated subsequent to a medical, surgical or diagnostic procedure by a licensed health care professional or at a health care site or facility.

(b) Standards to assure the protection of patient privacy in data collected, published, released, used and accessed under this section, including compliance with applicable federal law.

(c) Standards for the publication, release, and use of and access to data reported in accordance with this section, including fees to be charged.

(d) Provisions requiring specified health care providers and third-party health care payers to report data to the system, with specifications of the data, circumstances, format, time and method of reporting.

(e) Provisions to acquire data relating to health care provided (i) to patients for whom there is no third-party health care payer and (ii)

under arrangements that do not involve fee-for-service payment.

(f) Phased-in implementation of the system.

3. The commissioner may provide that the system may participate in or cooperate with a similar system operated by, or receive information from or provide information to, a regional or national entity or another jurisdiction, including making appropriate agreements and applying for approvals, provided that the protections for health care providers, patients, and third-party health care payers in this section are preserved and comparable provisions are included in the other system.

4. The commissioner may provide for access to data in the system by a health care provider relating to a patient being treated by the health care provider, subject to this section and applicable state and federal law.

5. In operating the system, the commissioner shall consider national standards, including but not limited to those approved by the National Uniform Billing Committee (NUBC) or required under national electronic data interchange (EDI) standards for health care transactions. The commissioner shall also consider the use of the Statewide Health Information Network for New York in relation to the system.

6. Notwithstanding any inconsistent provision of law to the contrary, including but not limited to section one hundred two of the executive law, such rules and regulations may describe data elements by reference to information reasonably available to regulated parties, as such material may be amended in the future, even though such material cannot be precisely identified to the extent that it is amended in the future;

provided, however, that the commissioner shall precisely identify and publish such data elements.

7. The commissioner may contract with one or more entities to operate any part of the system subject to this section.

8. The commissioner may accept grants and enter into contracts as may be necessary to provide funding for the system.

9. The commissioner shall publish an annual report relating to health care utilization, cost, quality, and safety, including data on health disparities.

\* NB Effective until March 31, 2015

\* § 2816. Statewide planning and research cooperative system. 1. The statewide planning and research cooperative system in the department is continued, as provided in this section. The statewide planning and research cooperative system shall be developed and operated by the commissioner in consultation with the council, and shall be comprised of such data elements as may be specified by regulation.

2. Regulations governing the statewide planning and research cooperative system shall include, but not be limited to, the following:

(a) Specification of patient and other data elements and format to be reported including data related to:

(i) inpatient hospitalization data from general hospitals;

(ii) ambulatory surgery data from hospital-based ambulatory surgery services and all other ambulatory surgery facilities licensed under this article;

(iii) emergency department data from general hospitals;

(iv) outpatient clinic data from general hospitals and diagnostic and treatment centers licensed under this article, provided, however, that notwithstanding subdivision one of this section the commissioner, in consultation with the health care industry, is authorized to promulgate or adopt any rules or regulations necessary to implement the collection of data pursuant to this subparagraph; and

(v) the data specified in this paragraph shall include the identification of patients transferred, admitted or treated subsequent to a medical, surgical or diagnostic procedure by a licensed health care professional at a site or facility other than those specified in subparagraph (i), (ii), (iii) or (iv) of this paragraph.

(b) Standards to assure the protection of patient privacy in data collected and released under this section.

(c) Standards for the publication and release of data reported in accordance with this section.

\* NB Effective March 31, 2015

## **State Finance Law Section 97-x**

§ 97-x. Statewide planning and research cooperative system; assessment of annual fees on general hospitals. 1. Each general hospital shall be assessed an annual fee by the commissioner of health calculated on the basis of its proportionate share of the sum of total costs reported by all general hospitals in the most recent calendar year for which certified data are available. Such fee shall not exceed one-tenth of one percent of the total costs reported by such general hospital. Where rates of payment for general hospital services established pursuant to



section twenty-eight hundred seven-a of the public health law or pursuant to section twenty-eight hundred seven-c of the public health law have not been adjusted to reflect the proportionate share of costs associated with such annual fee, rates shall be so adjusted. The commissioner of health shall promulgate regulations establishing a time schedule for payment of annual fees assessed on general hospitals. The commissioner of health shall charge a user fee for the production of any data to any person or organization, provided, however, that the commissioner of health may waive such fee for the provision of reports, to be defined in regulation, to a general hospital or its designee as approved by the commissioner of health or third-party payor or health systems agency to perform duties and functions provided for in subdivision seven, excluding paragraph (s) of such subdivision, of section twenty-nine hundred four-b of the public health law. Notwithstanding any inconsistent provisions of any general or special law, charges established pursuant to subdivision twelve of section twenty-eight hundred seven-a of the public health law or pursuant to paragraph (c) of subdivision one of section twenty-eight hundred seven-c of the public health law shall be permitted to increase to reflect increased costs resulting from the proportionate cost of the annual fees assessed pursuant to this subdivision.

2. The sum of annual fees collected from general hospitals and user fees shall be sufficient to provide all monies necessary to repay any monies which may be appropriated to support the statewide planning and research cooperative system, established under section two thousand eight hundred sixteen of the public health law, in the manner provided by law, provided, however, that such fees may be adjusted at any time in the event that monies received exceed the appropriation. In the event that monies available are not sufficient to fully make such repayments, the commissioner of health shall, after notification and subsequent consultation with the state hospital review and planning council and subject to the approval of the director of the budget, modify, amend,

alter or otherwise adjust the scope of the activities undertaken and/or the manner in which the activities are undertaken, or to the extent allowed by law, after notification of and subsequent consultation with the state hospital review and planning council and subject to the approval of the director of the budget, modify, amend, alter or otherwise adjust the fees assessed on general hospitals, within the percent limitation set forth above, such that monies will be available to make all necessary repayments. Whenever an adjustment in the annual fee assessed on general hospitals is made, reimbursement rates shall also be adjusted to reflect the increase or decrease in cost associated with the annual fee.

3. The commissioner of health shall consult with the state hospital review and planning council regarding the operation and continued development of the statewide planning and research cooperative system.

4. Notwithstanding any inconsistent provision of this section, general hospitals shall not be liable for payment of an allocable share of the annual fees applicable on or after January first, nineteen hundred eighty-eight based on services provided to persons eligible for payments by state governmental agencies and rates of payment for state governmental agencies established pursuant to section twenty-eight hundred seven-c of the public health law shall not be adjusted to reflect costs associated with the annual fees, provided, however, solely for purposes of the calculations pursuant to subdivision two of this section annual fees collected from general hospitals shall be deemed to include the amount of the allocable share of such annual fees for which the hospital is not liable for payment pursuant to this subdivision.

## J. APPENDIX G: NYS APD Vendor Questions Template

All questions regarding this RFI must be submitted using the below template and submitted via electronic mail by the date and time set forth above in Section B.I.3 of the RFI to the following: [APDRFI@health.state.ny.us](mailto:APDRFI@health.state.ny.us) with the subject line “APD RFI Vendor Questions”.

Vendor Name:

RFI Section Name and #	Page #	Question