VHCURES 3.0 Request for Information

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Vendor Information: Freedman Health Care

Freedman HealthCare, LLC (FHC) is pleased to respond to the Request for Information (RFI) issued by the Green Mountain Care Board (GMCB) to gather input on ways in which to expand and enrich the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES). FHC understands that the GMCB seeks insight into opportunities for VHCURES to maintain and advance existing data capabilities, improve reporting, and especially to provide reports and analysis for the All Payer Model (APM).

As the leading national expert on APCDs, FHC is especially well-positioned to provide this expertise and shepherd the GMCB into this next, enhanced phase of VHCURES. Established in 2005, FHC is a focused consulting firm that helps clients put health data to work to solve complex problems. FHC's work in 30 states includes **focused support and leadership for 18 claims database projects.** Our unique expertise brings "best in class" information and guidance to startups and ongoing projects through:

Where We Work

- strategic planning
- governance and regulatory development
- data management strategy
- data vendor procurement and contracting
- data quality process development
- operations/vendor oversight
- public reporting strategies
- data release design and operations

FHC is *especially* familiar with the process of planning for and conducting APCD vendor procurements, having led this effort in seven states in the last five years. For example, in December 2015, FHC led the procurement for the Center for Improving Value in Healthcare (CIVHC), the organization that manages the Colorado APCD. This engagement began with an in-depth needs assessment to understand the current state and future vision for data collection and analytics, was followed by drafting a data manager RFP that addressed identified gaps and opportunities, and culminated with the evaluation of all respondent bidders and negotiation of a new data vendor contract. Through this effort, CIVHC was able to expand the overall CO-APCD infrastructure, capacity, and functionality by accelerating the data processing timeline, providing unprecedented analytic access to the data (through different audience-specific portals), and optimizing funding sources by tracking prospective data customers. Similarly, FHC supported Maryland, Rhode Island and Oregon in designing and procuring the "next generation" for their database projects.

Because FHC is an independent company and unaffiliated with all data management vendors in this space, we offer unbiased insights and strategies into vendor characteristics and state experiences. Our team members' collective experience informs our insight into the most effective strategies to design, purchase and manage the vendors who provide these services. With this perspective, the FHC team

helps the state APCD teams navigate through contracting and ensure that data vendors are held to the highest possible standards.

In addition to our experience with APCDs, FHC has conducted several technical and operational assessments for large data infrastructure projects, including those in Rhode Island, Illinois and Maine. All of these engagements resulted in recommendations that helped the organizations move forward quickly and efficiently, while better supporting the needs of end-users.

FHC's advice and assistance are drawn from our team's experience as data administrators, analysts, researchers, project managers, and data quality designers. Together, we provide customized assistance to APCDs that empowers state teams to make informed, high-visibility commitments to data management vendors, and then hold those data management vendors accountable to their contract terms and deliverables. FHC welcomes an opportunity to discuss how the GMCB could benefit from our insight and lessons learned for the next generation of VHCURES.

Cost Estimates

A. APCD Vendor Data Management Functions

FHC has compiled information about state APCD procurements in conjunction with monitoring the performance of the vendor marketplace. Costs for APCD data management vendors vary from state to state based upon several factors, including but not limited to:

- the number of covered lives for which data will be collected and managed;
- the number of years of data to be collected and stored;
- the types and complexity of groupers and analytic tools to be applied to the data;
- whether the data is managed through a vendor's proprietary tool or housed in a state-managed environment; and
- the data release processes and expectations around custom reports design and development.

Table 1 shows a range of total APCD vendor contract costs. Note that the specific service levels and products vary from state to state and may not be directly comparable to VHCURES' current or future state. This information is based on reviews of publicly available contract documents for recent procurements and contracts in progress.

Table 1: Range of Data Vendor Annual Contract Costs

Service	Vendor	Annual Estimated Cost
Claims data collection and aggregation • Data intake from submitters • Data storage and security • QA and validation processes • Data consolidation • Conversion of historic data • Enhancements • Accessibility for client • Project management and documentation	Vendor 1	Initial: $690K - $1.2M Ongoing: $560K - $1.1M
	Vendor 2	Initial: $640K - $1.1M Ongoing: $250K - $900K
	Vendor 3	Initial: $600K - $900K Ongoing: $500K - $900K
	Vendor 4	Initial: $750K+ Ongoing: $750K
Clinical data portal hosting	Vendor 5	$200K
Integrating Medicare FFS Data (not including CMS data fees)	Vendor 6	$150K

B. FHC Project Design, Implementation and Oversight Services

In our work with 18 APCDs over the past decade, FHC has welcomed opportunities to provide targeted expertise to assist state project teams in successful launch and operations of their APCDs. Our insights into the day-to-day workings of APCDs, informs our advice and support to clients in order to achieve on time, on budget and high quality data products. We seek to develop state teams' capacity with strategic advice on developing a strong, effective approach to contract management.

As outlined in Table 2, FHC has extensive experience to support GMCB's interest in expanding VHCURES' functionality in a responsible and cost-efficient way. The following section describes the types of services that FHC offers to support the GMCB's efforts.

Table 2: FHC Experience with Guiding APCD Projects to Success

State	Year of FHC Engagement	Development/ Stakeholder Engagement	Needs Assessment	Data Vendor Procurement Support	Data Reporting and Analysis	Project Management	Technical Systems Analysis
Alaska	2012-2013	X	X				X
Arkansas	2013 - present	X		X	X	X	X
Colorado	2011 - present	X	X	X	X	X	X
Connecticut	2012 -2013	X	X	X			X
Delaware	2017- present	X	X			X	
Hawaii	2017- present		X			X	
Kansas	2014-2015	X			X		
Kentucky	2015	X	X			X	X
Maryland	2014 - present	X	X	X	X	X	X
Massachusetts	2006 - present	X	X	X	X	X	X
Minnesota	2014 - present	X			X		X
New Hampshire	2014	X					
Oregon	2015 - present	X		X		X	X
Rhode Island	2010 - present	X	X	X	X	X	X
Tennessee	2012		X		X		X
Washington	2014-2016	X	X		X		X
Wisconsin	2017- present	X	X	X			X
Utah	2017- present	X					

1. **Needs Assessment:** Before developing alternatives to VHCURES' existing systems and tools, FHC recommends assessing the strengths and weaknesses of the current database and Data Vendor contract, in relation to the articulated goals of GMCB and its stakeholders. FHC finds that states poised for change – like Vermont – seek information about the future vision from internal agency users, other state agency stakeholders and user communities. Typically, the process includes stakeholder interviews to build a comprehensive inventory of use cases, a review of documentation on the existing system architecture, a thorough contract review, an APCD Data Vendor scan, and identifying options to fill the gaps. This assessment identifies and documents areas of concern from both an IT and operational perspective, with an eye towards the corrective future solution, and provides a baseline overview of existing systems, how they work, what they do, and their limitations. Examples of tasks include:

Subtask	Description
Gap Analysis	A gap analysis to understand the current state of VHCURES technology, processes, and data offerings vis-à-vis GMCB's future vision and users' analytic needs. Typically this assessment includes: • Meeting with GMCB staff to understand VHCURES' current challenges, vision, and limitations; • Stakeholder interviews to obtain feedback regarding the current data collection processes, technology, and data needs to identify gaps in process, analytic and technical capabilities; and • A review of documentation on the existing system architecture, processes, and data products.
Contract Review	An in-depth review of the existing contract to identify weaknesses and opportunities to acquire an efficient and effective data management infrastructure. Based on FHC's experience in other states, particular topics include (but are not limited to): • Service Level Requirements - minimum acceptable thresholds for contractor response time, system down time, data quality and/or error response, as well as any penalties for failing to comply with the requirements; • Termination and/or Transition Assistance – the type of assistance that the contractor must provide in the event that GMCB procures a new data vendor or moves operations in-house; • Ownership of Intellectual Property – including who owns any technology or code that was developed for VHCURES, the deliverables/reports produced; the requirements and design documents; domain names; etc.
APCD Data Vendor Scan	An APCD data vendor market scan to answer the following questions: • What data management vendors are in use by other APCDS and similar initiatives and what are their annual contract costs? • What work is being performed by vendors vs. in-house services? • To what extent are costs comparable across the different contracts? • Are there other data collection models that might be advantageous to VT? • What vendors have the expertise and experience required to fill some of the gaps identified in the gap analysis, and what additional data products or services could they bring to the table?
Options Analysis	Informed by the gap analysis, contract review, and data vendor scan, FHC can develop an options analysis that presents various technical and analytic capabilities and solutions to advance VHCURES to its future vision. FHC sees this as an essential task to ensure that any new scope of work/RFP reflects the values of GMCB. FHC can provide GMCB with a side-by-side comparison of the options as well as a description of the risks, challenges, and benefits of using these options vis-à-vis each identified gap. FHC works with the project team to confirm appropriate evaluation criteria for the proposed options. Based on past engagements, FHC anticipates that evaluation criteria may include: estimated total costs; analytic complexity; administrative burden (on both GMCB and data submitters); legislative or statutory implications; timeline; duration; and overall feasibility.
Each of these subtasks could be performed independently; packaged together, the estimated cost ranges from $19,500 to $25,000	

2. **Data Quality Assessment and Design:** GMCB seeks to use the data to provide enhanced information reporting and to support crucial reporting requirements under APM and other health care innovation projects. Understanding and documenting data quality is essential to developing credibility with stakeholders and funders. The FHC team includes data quality experts with insight into the strengths and challenges of creating multi-payer claims databases and, more importantly, tailoring data quality monitoring and evaluation to address specific use cases. Examples include exploring:
    a. Trends within a particular file type –month to month consistency
    b. Cross file alignment – member identifiers matching up
    c. Cross payer comparisons

   Topics considered in similar engagements include: evaluating the current data quality methods and approach; gathering user feedback on data quality issues and commonly encountered questions; designing specific data quality metrics to address these issues; testing variation; presenting new data quality metrics; recommending changes to data collection requirements to mitigate identified issues. The estimated cost of this service depends on scope and duration. A smaller engagement might focus on designing new data quality metrics to use with submitters to validate the data; a larger engagement would include periodic, independent production of data quality evaluations. Potential range is $35,000 to $200,000.

3. **Data User Guide and Documentation**: In addition to expanding the scope of the user community, GMCB has expressed interest in creating Public Use Files. Other states have learned that user documentation must accompany the file to both maximize the value of the document as well as to properly manage expectations about the dataset. FHC helps states develop audience-specific documents describe the data sources, quality processes implemented over the life cycle of the data, descriptive statistics and known limitations. Based on feedback from other states, these materials should be tailored to address the specific concerns of different user groups. Perspectives vary among providers (that might be evaluated with this data), payers (concerned about price transparency) and researchers (who want as much unfiltered data as possible). Cost of similar engagements is $40,000 to $70,000.

4. **Data Release Inventory:** To help GMCB identify reports and analyses that may be of interest in Vermont to incorporate into the scope of work for any future Request for Proposals (RFPs), FHC can inventory APCD reports and analyses from other state-run APCDs. The survey addresses the following topics:
    • What are the research or policy questions in active production?
    • What is the reason for the report or analysis (e.g., legislative mandate, internal priority)
    • Is the report or analysis being prepared by in-house staff or by contractors?
    • If prepared by state agency staff, what skill sets and tools are being used?
    • If available, what are the methodologies being employed?
    • If available, what are the costs of producing the report or analysis?
    • How long does the report or analysis take to produce?
    • Do these reports or analyses fit with GMCB's goals?

   FHC welcomes an opportunity to discuss how our team could help build out the next iterations of VHCURES reports and analyses. FHC has performed similar analyses for $5,000 - $8,000.

5. **Procurement Support:** If GMCB determines that selective contracting is the best fit to meet its needs, FHC recommends dedicating resources to focused project management and results-oriented

production. FHC welcomes an opportunity to provide assistance in preparing for a procurement of new services, developing clear scopes of work for inclusion in contracting documents, and facilitating the selection and evaluation process. FHC can perform the following subtasks to accomplish this activity:

Subtask	Description
Draft Procurement Documents	FHC can draft a scope of work for the VHCURES Data Vendor, detailing all of the functions and deliverables required of the contractor, as well as the business and service level specifications, database infrastructure requirements, and a reporting schedule with key project milestones. FHC can also draft the following procurement documents, as needed: • Background and Purpose of the Procurement • Minimum Eligibility Requirements • Transition/Project Schedule • Proposal Response Requirements • Evaluation Criteria • Cost Proposal/Budget Template(s) • Standard Contract Terms and Conditions • Minimum Service Level Requirements
RFP Evaluation Assistance	FHC assists with recruiting the Evaluation Committee members and facilitating Evaluation Committee meetings. Related tasks usually include: • Proposing an evaluation timeline; • Developing agendas; • Developing the evaluation rubric; • Developing a crosswalk of key bidder response components; • Notifying top scorers; • Scheduling and facilitating in-person demonstrations; • Compiling and summarizing all scores; and • Drafting a memo detailing the selection criteria FHC's project manager, subject matter expert, and/or technical expert can serve as either advisory or voting members of the Committee – providing insight into what has worked in other states, what warrants further questioning or investigation, and whether the proposed project team and solution is a good fit for VHCURES.
Contract Support and Review	FHC consults on draft contract language and can support GMCB in negotiating the terms and conditions of the contract with the selected vendor. The FHC team keeps the vendor "honest" about what is and is not feasible. If a new vendor is selected, FHC facilitates and oversees transition discussions to ensure an orderly transition of the contract, data architecture, and/or data analytics and deliverables. If the incumbent (Onpoint) is successful in winning the new APCD contract, FHC helps oversee a transition to the new requirements.
Estimated Total Procurement Support Cost: $45,000 - $55,000

Business and Technical Requirements

Freedman HealthCare offers the following insights and comments on the "Anticipated Requirements" and "Other Considerations" for VHCURES outlined in the RFI. If there is additional information or clarifications needed upon your review of our response, please feel free to contact us directly. We welcome the opportunity to discuss our experience advising states and/or overseeing many of these requirements, and the lessons we have learned.

1. **Data Collection, Cleansing, Consolidation and Distribution**
   a. ***Web-Based Portal for Data Submissions***: As seen in other states, any future SOW or RFP require a web-based portal with a secure and encrypted upload interface for data submitters to transmit data to VHCURES. The web portal should be capable of the following:
      i. Provide feedback on data quality and volume trending back to submitters,
      ii. Allow data submitters and GMCB to track the progress of submissions;
      iii. Allow data submitters to apply for and check the status of waiver requests; and
      iv. Allow GMCB staff to review and approve waiver requests.

   Similar services are currently provided in both Maryland and Colorado. FHC has found that alternatives to a high-functioning automated portal (e.g. transfer of files via SFTP, hard-copy waiver forms, separate data validation reports, etc.) can be cumbersome, difficult to keep track of, and create fatigue among submitters and staff.

   b. ***Expedited Data Processing Time:*** It is our understanding that the current contract allows for a 45-day turnaround period for receiving, validating, and providing fully-processed data to the State. FHC recommends that GMCB considers reducing this period to 30 days. A 30-day turnaround time for fully-processed data was required in the RFP issued by CIVHC for the CO APCD, and was successfully procured. FHC's experience conducting needs assessments for other states (see Cost Estimate section 1: Needs Assessment) shows that faster turnaround times support significantly more use cases.

   c. ***Transparency into Data Consolidation***: Because many vendors rely on proprietary methodologies, states and submitters are not able to replicate calculations for the purposes of data validation and must put blind faith into vendor calculations. In response, many APCD administrators are demanding transparency into the processes that vendors use to transform data through aggregation, groupers and other value added services. Examples of transparency requirements that FHC may recommend for VHCURES include:
      i. Requiring all vendors to provide detailed documentation for all methodologies and tools proposed and implemented. VHCURES should not allow a "black box" approach, where methods are considered proprietary and therefore not disclosed. FHC recommends that VHCURES give preference to vendors who propose standardized measures which allow for comparisons between other states and regions. Examples include:
         1. Generating patient-level risk scores using the Chronic Illness & Disability Payment System (CDPS) methodology;
         2. Creating distinct condition categories using the AHRQ Clinical Classification Software (CCS) methodology;
         3. Classifying Medicare patients according to their healthcare resource consumption using CMS' Medicare Severity DRGs (MS-DRGs);

4. Assigning Berenson-Eggers Type of Service (BETOS) procedure codes in order to analyze Medicare costs; and

5. Classifying healthcare providers by taxonomy code using the National Plan and Provider Enumeration System (NPPES).

ii. Requiring open, standards-based architecture with an API or web services framework as part of the Master Person and Master Provider Indices that would enable both to interoperate with third party data sources (e.g. another statewide provider directory, an ACO Model member database, etc.).

2. Master Person and Master Provider Index

FHC agrees that many of the use cases for VHCURES will be foundationally dependent upon the strength of the underlying accuracy of member and provider identifiers. The task of creating an initial, valid baseline file is significant, as is the ongoing need to update and revise as new information emerges. This is a particular challenge in a fast-evolving provider marketplace, with large health care service organizations accumulating smaller practices under a single corporate umbrella. VHCURES must therefore expect to continue to invest in maintaining and updating these files. Degree of accuracy needed depends upon the ultimate use cases (see our Cost Estimate section 1: Needs Assessment). For example, understanding provider level performance demands more precision from a Master Provider Index than exploration of geographic variation in quality of care.

A highly accurate Master Person Identifier process varies based on the number of lives collected by the database. Several data management vendors include this as a part of the ongoing data collection and aggregation (see Cost Estimate section 1: Needs Assessment/APCD Data Vendor Scan). Master Provider Index services are also often included in the base fees; however, Utah's 2013 RFP requested a separate price for this service. Some responses included a one-time startup fee, after which the annual maintenance was considerably lower. Vendors quoted costs ranging from approximately $85,000 to $490,000 total over the five year term of the contract.

3. Data Warehouse, Analytic Enclave

a. ***In-House Hosting:*** An emerging theme across APCD states is to host the quality-tested, aggregated data on state owned equipment as opposed to an off-site "secure container". Hosting the data in-house would provide the most control to GMCB, reduce reliance upon a vendor to provide extracts of the data when needed, and allow for ad-hoc integration with other data sources without a change order request. GMCB staff should have direct access to the data and could also choose to have an external vendor overlay a business intelligence layer (see below) for more user-friendly access.

b. ***Analytic/Business Intelligence Layer:*** Across the country, there is increasing interest in leveraging existing state investments in business intelligence and data visualization tools, rather than purchasing new ones for the APCD without using a vendor's otherwise proprietary tool. Towards this end, states like Rhode Island have required data management vendors to overlay the state's existing tools on top of the APCD database or extracts that have been prepared for this purpose by them. A thorough needs assessment would expose which existing data query/analytic tool GMCB's stakeholders are most interested in. It is especially important to first try to leverage an existing tool because APCD managers and hands on users tell FHC that <u>no one data query tool is meeting all users' needs</u>. Analysts capable of creating more advanced extracts and queries report that learning

a vendor's proprietary query tool does not enhance their ability to quickly and reliably obtain needed data. In fact, FHC frequently hears that analysts and end users prefer to use their own data analytic software (as opposed to a vendor's proprietary tools). For "deep dives", analysts generally state a preference for SAS, SQL, and R. Other important features include the ability to create custom queries and save them in a repository to run again in the future. For less detailed analytics, FHC hears growing interested in using Tableau to create summarized data displays for dashboard purposes. This tool also requires some training and learning.

4. **Public Use Data and/or Analytic Files**
    a. **De-Identified Data:** Releasing de-identified data for the purposes of increased data transparency has been a goal of several states. To date, APCDs have taken a very cautious approach to creating de-identified datasets. Minnesota's legislature directed the APCD to create public use datasets within the state's specific privacy parameters. Developing the project included a significant in-house analytic component as well as vendor services for developing the specific extract, external review of the extract files, stakeholder engagement and documentation development. The cost of contracted services for the project over its multi-year development cycle is estimated at $85,000. GMCB may also wish to reach out to New Hampshire, which recently contracted with Compass Health Analytics to redesign their de-identified public use data sets, for a total contract value of $92,275[1].

    b. **Analytic Extracts:** Among the APCD data vendors that are contracted to produce extracts (and where the cost of such services is separated from ongoing operations costs), costs range from $169,000 to $260,000 per year for quarterly production of data extracts. As part of the APCD Data Vendor Scan, FHC can provide more details about the vendors who have historically produced these extracts (and at what price) and which other vendors are trying to get into the market.

5. **Other Considerations**
    a. **Lockbox Services:** FHC is only aware of a single state – Rhode Island – that currently has a Lockbox vendor. Rhode Island law, states that the actual APCD cannot collect patient identifiers, and calls for an external vendor to assign and maintain a unique identifier, which costs the state $185,000 annually. FHC currently manages this vendor in Rhode Island and would be eager to share other important considerations and our experiences.

    b. **Procurement Considerations:** As GMCB contemplates whether to go out for competitive procurement for VHCURES Data Management tasks, FHC encourages the team to consider the following:
        i. Required vs. Flexible Tasks: Will all tasks outlined in the RFP be required by each bidder, or will bidders be able to bid *only* on those tasks for which they feel particularly qualified – possibly resulting in several winning bidders? States like CO have decided to go the flexible route, feeling strongly that it enabled them to get the very best responses for each task because the core competencies required for the various tasks are so different (e.g. data collection vs. analytics).

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[1] http://sos.nh.gov/WorkArea/DownloadAsset.aspx?id=8589965869

ii. <u>Include Standard Contract and Requirements in RFP</u>: To reduce contract negotiation time, states have begun to include their standard contract terms and conditions as well as their service level requirements into the RFP, requiring bidders to red-line any exceptions they take to the standard terms. This allows the state to clearly articulate their expectations in regards to contracting and alerts the states to "difficult" vendors.

iii. <u>Extended RFP Open Window:</u> If possible, FHC would encourage GMCB to extend the window of time that bidders have to respond to the RFP, beyond the traditional 4-week window. This invites more non-traditional APCD bidders to respond, and from FHC's experience, there are many who are deserving and can bring new functionality to the table (see Cost Estimate section 1: Needs Assessment, APCD Data Vendor Scan).

Conclusion

FHC is pleased to provide the information and findings to the GMCB as part of the process to determine the future evolution of VHCURES. FHC remains committed to helping each multi-payer claims database project create and implement the most appropriate, cost effective path *for that project.* GMCB and VHCURES have led the way on some important cross-state studies and analyses and took the first steps to collaborate with the Health Care Cost Institute. GMCB's leadership role should continue and build on these important accomplishments. FHC looks forward to an opportunity to explore how our expertise and lessons learned elsewhere can help GMCB move forward and rapidly achieve new reporting goals and insights.

FHC Team Biographies

John D. Freedman, MD, MBA, has 25 years' experience in health data analytics, performance measurement and improvement, and health care reform. Before founding Freedman HealthCare in 2005, he held leadership roles at multiple innovative health care companies including Kaiser Permanente and Tufts Health Plan. Since then, Dr. Freedman has led several of FHC's analytic engagements to support clients, including the work for the Massachusetts Attorney General's Office, the Group Insurance Commission, and the Health Policy Commission. His deep knowledge of health data, particularly claims and quality data, allows him to develop client-specific strategies for effective communication and reporting. Notably, he led the design and development of Massachusetts' first consumer-facing price and quality transparency website, for which he designed the original data displays. He supported Colorado's APCD team in developing the interactive price comparison website *COhealthdata.org* (now www.COmedprice.org). Through an engagement with the Robert Wood Johnson Foundation's Aligning Forces for Quality (AF4Q) program, he analyzed and created Tableau reports showing the program's health effects in 16 communities nationwide. Since 2010, he has created many of the data displays for the annual healthcare cost trends reports produced by the Massachusetts Attorney General's Office. Most recently, he designed the content and display for the first public report released by the Rhode Island APCD and advised on the design for future reports. Through these and other engagements, Dr. Freedman has demonstrated his ability to protect sensitive data by implementing a range of data security strategies, as well as his aptitude for translating complex health care data into meaningful information for a broad range of stakeholders. Dr. Freedman graduated from Harvard College, the University Of Pennsylvania School Of Medicine, and the University Of Louisville School Of Business.

Linda Green, MPA, Vice President - Programs, has 30 years of experience in state and local government addressing complex public policy questions.   Ms. Green's recent projects focus on developing and implementing effective strategies for state-level health data collection and analysis. She serves as engagement lead for all of FHC's all payer claims database projects in 14 states, including Colorado, Massachusetts, Rhode Island and Arkansas. As the former Director of Health Data Analytics for the Massachusetts Division of Health Care Finance and Policy, Ms. Green oversaw the APCD and hospital discharge data sets, including, regulatory process; data release policies; data intake, editing and verification procedures; harmonization with other states; measurement calculation; and website reporting implementation. She successfully streamlined the agency's data release operation, and developed a similar process for the Health Care Quality and Cost Council. Her prior experience as Director of the Managed Care Reimbursement Unit for Commonwealth's Office of Acute and Ambulatory Care involved taking the financial lead for a $1.7B managed care program serving over 400,000 covered lives.

Tanya Bernstein, MPH, Senior Consultant, is a seasoned project manager with a decades' worth of experience overseeing the day-to-day operations of clinical, business, and health services projects including those based in Rhode Island. As Senior Consultant at FHC, Ms. Bernstein works with a wide-range of clients to help them develop effective strategies and operation models, and then implement those changes quickly and efficiently. Current and past engagements have included project management and strategic planning for two state-specific APCD efforts, including Rhode Island; focus group facilitation; planning and leading ACA-related transformation projects; and helping clients identify and successfully procure funding sources. Prior to joining FHC, Ms. Bernstein was a senior research administrator at Boston Children's Hospital and worked as a research associate and project manager for the Institute for Clinical Research and Health Policy Studies at Tufts Medical Center. Ms. Bernstein received a Bachelor's degree from Tufts University and a Master's Degree in Public Health with a concentration in Health Services Management and Policy, from the Tufts University School of Medicine. Ms. Bernstein expects to become a certified Project Management Professional (PMP) by December 2014 and is proficient in the use of project management and process visualization software including MS Project and MS Visio.

Elizabeth Ellis, Senior Technical Consultant, is an accomplished and high performing leader with extensive expertise in the application of analytics, business intelligence, data mining, health insurance exchanges, and healthcare statistics. While at FHC, Ms. Ellis has used her vast technical experience to advise states and non-profits on leveraging new technologies to manage and integrate larger and more complex healthcare data sets. As the healthcare industry continues to emphasize value-based care, better quality, and improved population health, big data analytics capability is critical to FHC's success. Before joining FHC, Ms. Ellis's professional focus included work with both state and federal health insurance exchanges, supporting large and often complex projects with great success in identifying key work streams, establishing teams, developing project plans, communicating key milestones and deliverables, and reporting progress toward goals. Ms. Ellis takes great pride in her experience leading projects with the Massachusetts Health Connector and the State of Rhode Island EOHHS and in her work developing and deploying key real-time web analytics for use in the healthcare.gov command center in Columbia, Maryland during the 2013 Obamacare Tech Surge. In addition to her technical experience, Ms. Ellis holds a BFA in painting from Corcoran School of the Arts and Design at The George Washington University.