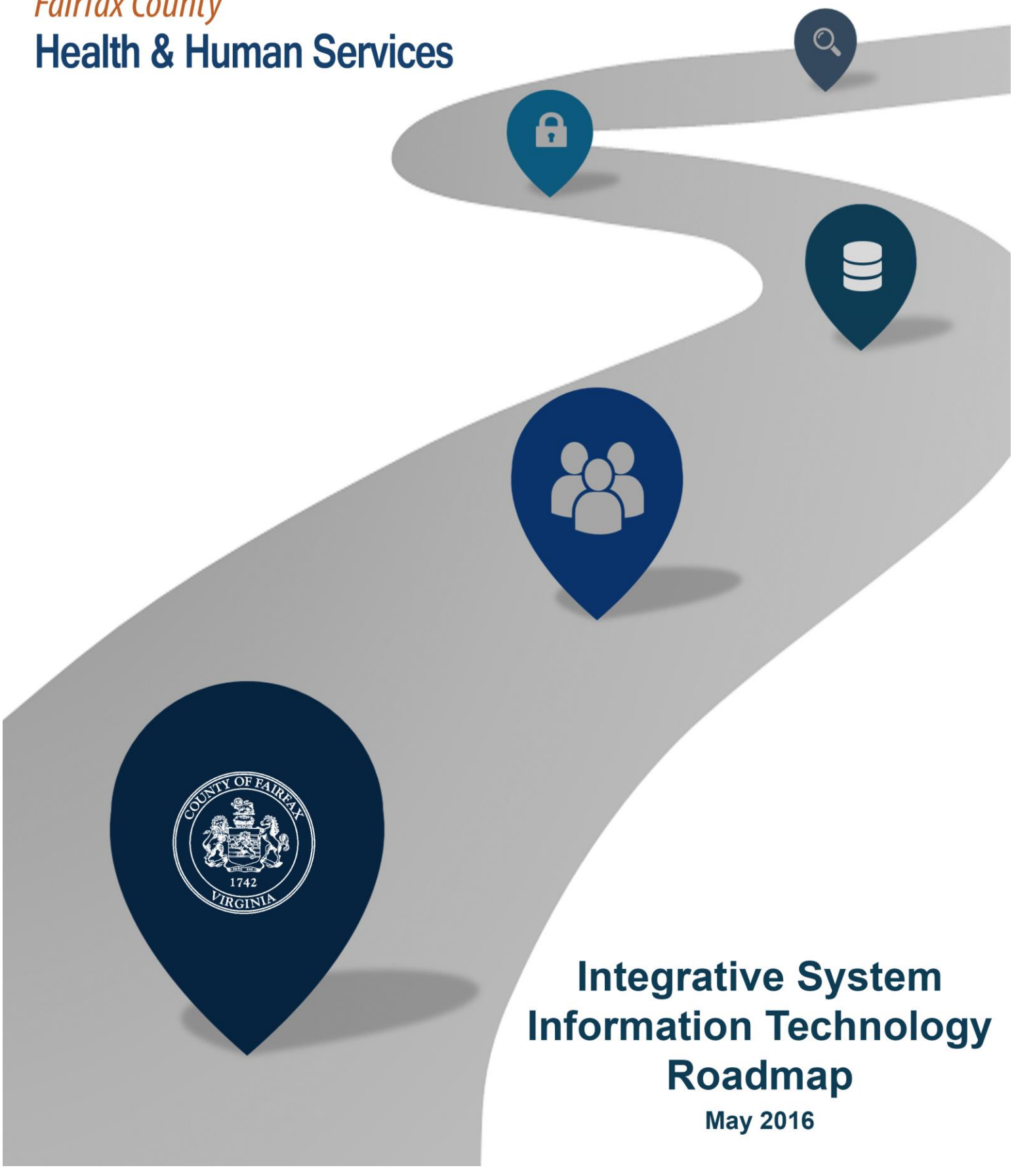
Fairfax County

Health & Human Services



Integrative System Information Technology Roadmap

May 2016

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Introduction and Rationale

This document – the **Fairfax County Health and Human Services System (FCHHSS) Integrative System Information Technology Roadmap** ("Roadmap") – lays out an executable plan with prioritized, deliberately sequenced activities that will enable the County to establish the information technology (IT) foundation that would be deployed progressively to enable the transformation of the FCHHSS into an Integrative System. The design of this Integrative System will be based on the integrative model of health and human services as articulated by the American Public Human Services Association (APHSA), although it will also incorporate the uniqueness and history of the Commonwealth of Virginia, Fairfax County and the many health and human services programs which the County funds and/or administers.

The Integrative System is focused on addressing the root causes of client needs through the seamless coordination of services across multiple programs. This model is characterized by:

- A shared vision of a health and human services system that, from the perspective of its clients, is centered on them and not comprised of a collection of fragmented programs and services that are challenging or impossible to navigate.

- A shared commitment by the leadership of the various programs and agencies that make up the health and human services system to realizing this vision.

- A recognition by leadership that, while the various programs and agencies are bound by common clients and purposes and must interact and coordinate efforts, they are "steeped in difference" and have unique needs that have to be acknowledged and addressed.

- Decision-making and accountability for outcomes are shared by the parties involved in the delivery of health and human services, regardless of any single program's role in the delivery and management of the services.

In order to implement the proposed Integrative System, and in recognition of the essential enabling role that IT will play in the implementation of this System, the County established the Health and Human Services IT Governance Board (HHSITGB), comprised of leaders of the various departments that make up the County's Health and Human Services System as well as the Department of Information Technology (DIT) and Office of the County Executive. The Governance Board engaged Health Management Associates (HMA), a national health and human services consulting and advisory services organization with in-depth knowledge of health and human service program operations and information systems, to facilitate development of the Roadmap.

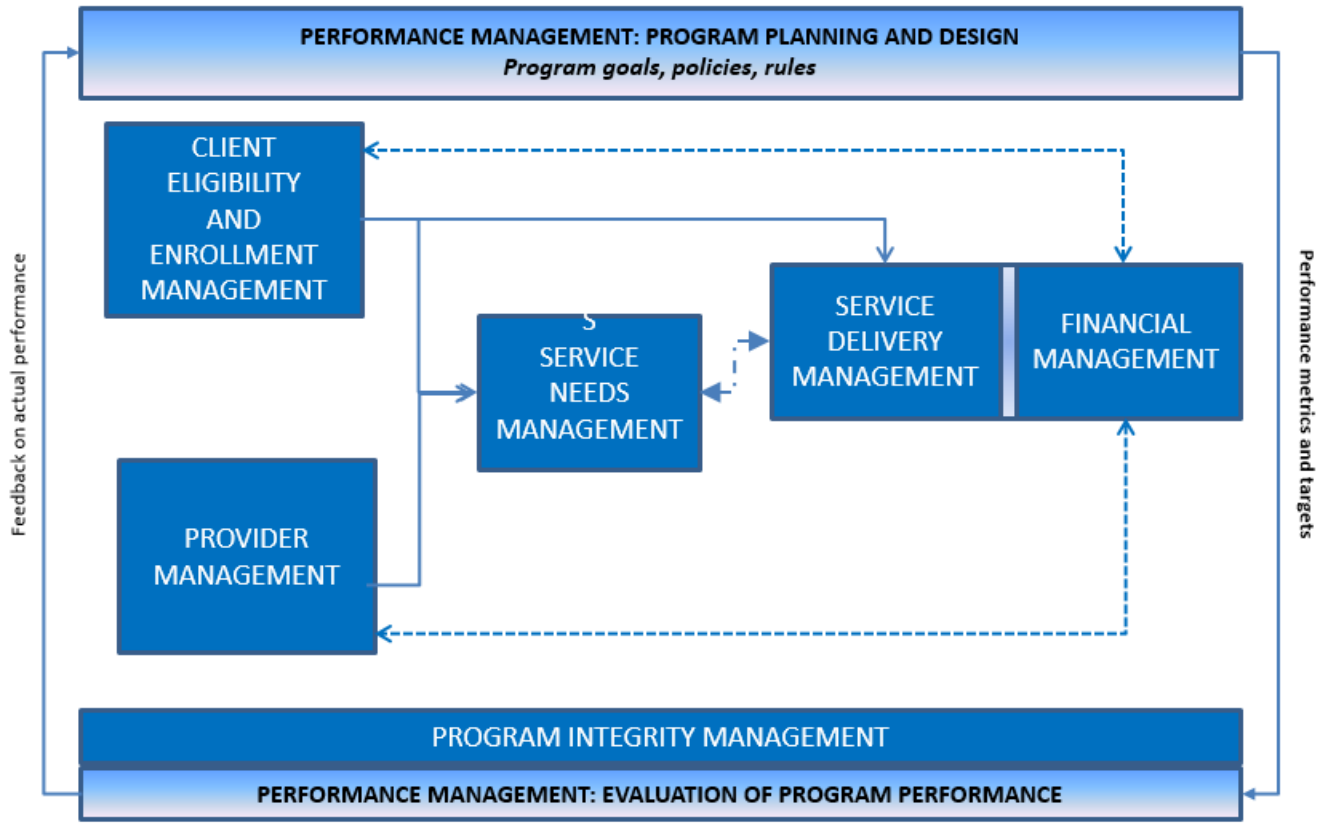
The Roadmap represents the viewpoints and captures the input of multiple stakeholders including but not limited to:

- The seven Capability Expectation Teams (CETs), comprised of program management staff from all eight FCHHSS agencies, that met over the course of three months to formulate capability expectations across seven functional areas (Figure 1 - Business Function Framework Used To Develop The Roadmap on page 3) that future IT solutions would need to meet in support of the Integrative System.

- The Process and Data Optimization (PDO) Workgroup, comprised primarily of deputy directors of the eight FCHHSS agencies that met over the course of five months to examine various issues around implementing an IT roadmap including information access, use and sharing; and critical factors for successful implementation of Roadmap initiatives.

- The County's Department of Information Technology, which worked with HMA to develop IT architecture and management expectations for future FCHHSS IT solutions and participated with HMA in the reviews of existing systems.

Figure 1 – BUSINESS FUNCTION FRAMEWORK USED TO DEVELOP THE ROADMAP



Furthermore, the Roadmap incorporates key takeaways from the Health and Human Services IT Showcase, an event held in November 2015 and January 2016. During the Showcase, several jurisdictions spread geographically across the U.S. – New York City, Allegheny County (Pennsylvania) and Pima County (Arizona) – shared IT initiatives they undertook to achieve greater integration across their respective health and human services agencies and, in the case of Pima County, beyond those agencies by also achieving greater connectivity with law enforcement and criminal justice agencies. The Showcase also featured presentations from information exchange organizations and IT vendors that offer solutions that have been instrumental in the implementation of health and human service integration initiatives in states and counties.

Moreover, the Roadmap reflects an agreement in principle on how the agencies that make up the FCHHSS will operate as an Integrative System and how IT will serve as an enabler of optimized, client-centered processes. Furthermore, the Roadmap is based on business-driven functional capability expectations and best practices for IT architecture, acquisition and management; as such it neither prescribes specific IT products or solutions, nor does it advocate for products or solutions from specific vendors. Those details will be fleshed out

prior to engaging in specific IT solution acquisitions or build projects. As such, the Roadmap is purposely designed to communicate future IT capabilities and needs in a compelling manner to a wide variety of stakeholders.

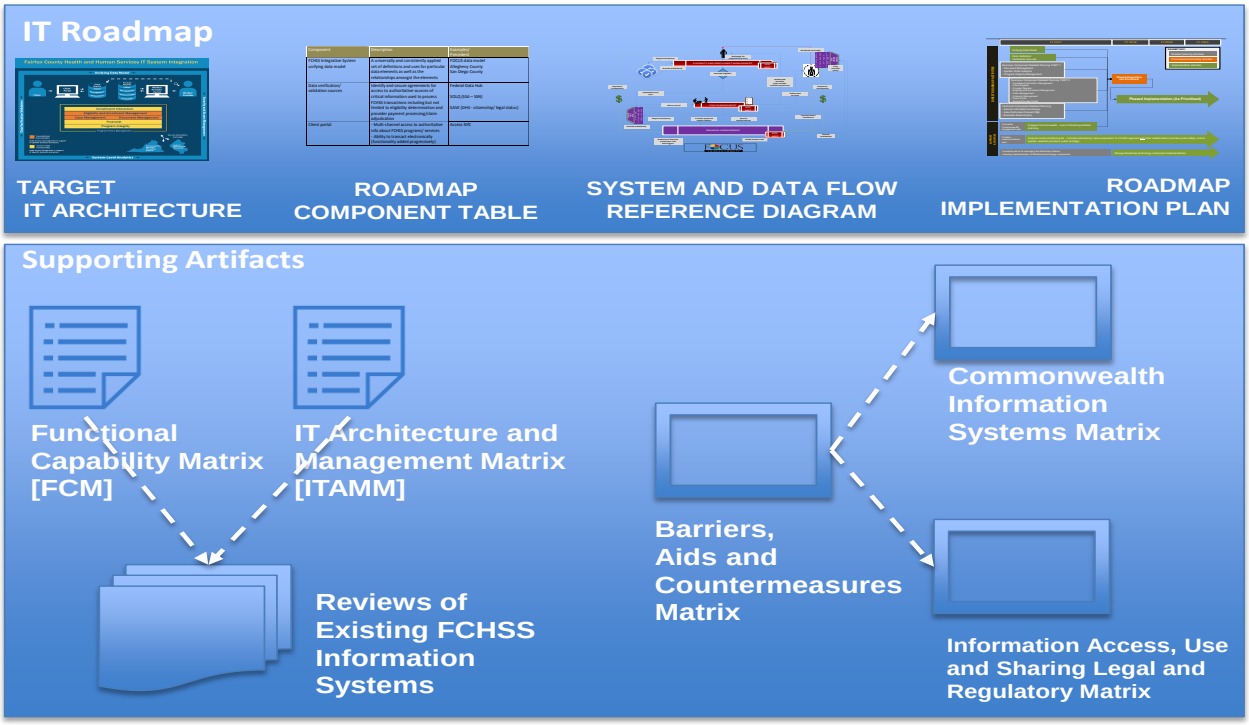
Finally, the Roadmap is predicated on the need to increase agility in the implementation, management and use of IT; specifically:

- Create a more nimble, responsive approach to IT implementation;
- Provide for a gradual/progressive approach to IT innovation;
- Incorporate "component based" and "service oriented" IT solutions that are designed to interoperate and support various programs/lines of business: wherever feasible, work off common IT components that can interoperate and be replaced or upgraded over time without compromising the functionality and performance of other components;
- Ensure IT supports more rapid, timely changes to policies, business rules and processes;
- Enable greater workforce mobility and flexibility; and
- Enable more significant, ideally real-time interaction across the FCHHSS agencies and programs and with FCHHSS external stakeholders.

Roadmap Structure and Content

The Roadmap is comprised of the following elements illustrated in Figure 2 – Roadmap Elements below:

Figure 2 - ROADMAP ELEMENTS



- **Target Architecture**
  The target architecture is comprised of the FCHHSS Integrative System Target IT Architecture Reference Diagram (Exhibit 1 on page 14) where interrelated business and technical IT components are profiled, and the FCHHSS IT Roadmap Component Table (Exhibit 2 on page 15) that articulates an end-state for those components in support of Integrative System goals.

  In the context of the Roadmap:
  - An IT component is a grouping/cluster of related functionality, which can be either *business* functionality (which an IT end user would utilize) or *technical* functionality (which operates outside of the IT end user's view but provides critical infrastructure in support of information exchange, program policy/business rule management, information security and access management, etc.).

  - Business components are further categorized based on how they will be used once implemented:
    - System wide - functionality which will be used across <u>all</u> FCHHSS agencies in support of specific business processes.
    - Consolidated - functionality which will be used across <u>most but not all</u> FCHHSS agencies in support of specific business processes; mandated Commonwealth or Federal systems

and highly specialized information systems used by each FCHHSS agency or groups of agencies will also be used in support of these business processes.

- An IT solution may supply functionality associated with multiple components, e.g. a vendor might offer an "integrated" IT solution that incorporates client eligibility and enrollment, case management and financial management functionality.

  The notion of IT components is employed in the target architecture not only to align the County's language regarding the functionality it seeks for the FCHHSS with the terminology used by the IT vendor community, but also in keeping with the expectation that the technology which would be implemented per the Roadmap would be flexible, modular, easy to configure and deploy and, if necessary, easy to replace. That notwithstanding, the County will have the option of building or acquiring the functionality it seeks out of multiple components as a single solution or a small number of IT solutions. These acquisition strategy decisions are yet to be made; they require extended due diligence and the evaluation of the advantages and drawbacks of various strategy options.

The FCHHSS IT Roadmap Component Table (Exhibit 2 on page 15) outlines the specific components that would be either built or acquired and subsequently configured to implement the proposed IT solutions. Components in this table are grouped as follows:

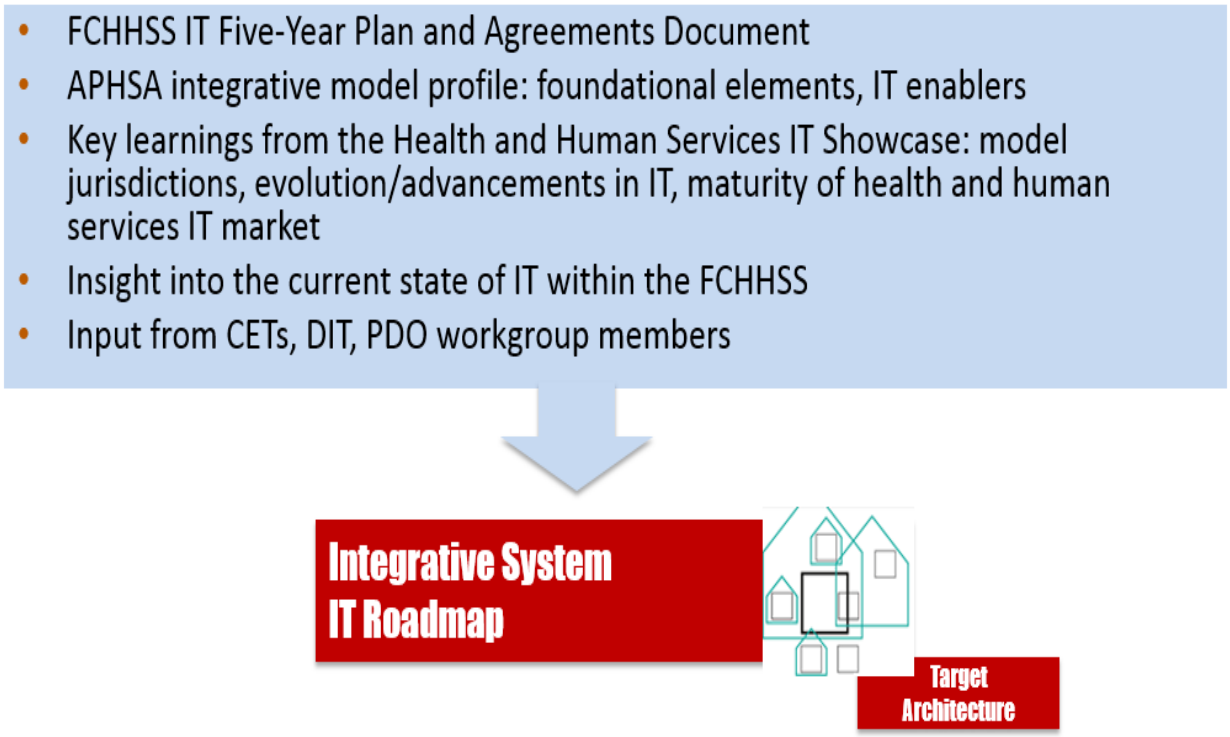
- Foundation laying – not specific to information technology, but required to establish:
  - A unifying data model that can be adopted to enable exchange of information and greater collaboration across future FCHHSS systems, consistent capture of information across all FCHHSS agencies that will facilitate information exchange and cross-program and cross-agency analytics
  - Authoritative sources of information validation and verification – whether these are Federal, Commonwealth or County sources – that can be employed consistently across the FCHHSS.

- Business components
  - Client portal
  - Provider/worker portal
  - Client register
  - Provider register
  - Constituent interaction management
  - Eligibility and enrollment management
  - Case management
  - Document management
  - Financial management
  - Program integrity management
  - System-level analytics

- Technical components
  - Service information exchange
  - Program policy management
  - Security and access management

The many inputs to the target architecture are illustrated in Figure 3 - FCHHSS Integrative System IT Roadmap and Target Architecture Inputs below.

Figure 3 – FCHHSS INTEGRATIVE SYSTEM IT ROADMAP AND TARGET ARCHITECTURE INPUTS



- **FCHHSS IT System and Data Flow Reference Diagram** (Exhibit 3 on page 19)
  This diagram is designed to articulate how the various IT components would be utilized in support of various FCHHSS functions. This diagram is both animated (in electronic format) and annotated, which enables FCHHSS stakeholders to grasp how different IT components will come together to enable more streamlined processes and more significant engagement with both FCHHSS clients and providers. Furthermore, this diagram is intended to provide a frame of reference but it is not prescriptive: additional deliberation will be required to build more detailed system and data flow diagrams that establish future workflows and uses of information. At this juncture, the purpose of this diagram is to visually articulate the aforementioned Integrative System's goals and principles and level-set the teams that will be working on implementing the IT Roadmap. Additionally, the diagram is designed to facilitate communications with stakeholders on the County's direction as it relates to FCHHSS IT.

  Specifically, the diagram illustrates goals of the Integrative System including but not limited to:
  - Eligibility determination, intake and initial assessment activities will be possible through multiple channels.
  - The notion of a *service continuum* will be realized within which providers across programs can collaborate and share information as needed to address the needs of specific clients, enabled by the right mix of IT assets and services.
  - Information systems used to manage activities within the service continuum will be interfaced

to administrative systems, thus avoiding redundant data entry and ensuring thorough tracking of County resources and funds.

- County information systems will be interfaced and, as needed, will feed data to and pull data from external systems to facilitate interaction with clients and providers, ensuring that valuable information held outside of the County flows to the right providers, and that the appropriate metrics and reports are made available to governance and regulatory bodies including private funders, State and Federal agencies. This movement of data will be facilitated by a *service information exchange*, a technology solution akin to a message broker or a service bus.

- **Roadmap Implementation Plan** (Exhibit 4 on page 20)
  The plan for implementing the Roadmap includes specific activities that are categorized as follows:
  - Detailed planning - includes evaluation of various acquisition strategy options for IT components, reaching agreement on the optimal strategy for one or multiple components (e.g. leverage an IT solution from another jurisdiction that supplies functionality consistent with several IT components), and establishing the project management, stakeholder communications and engagement infrastructure for sustaining this initiative.
  - Acquisition - includes, if applicable, IT solution procurement and contracting activities.
  - Implementation/deployment – staged as deemed optimal in accordance with initiative prioritization, resource and funding availability.

  At this juncture, for Roadmap implementation purposes the following assumptions have been applied:
  - Detailed acquisition and implementation planning activities related to the proposed business and technical components will be occurring in fiscal year 2017.
  - The foundation-laying Unifying Data Model, and Data Validation and Verification Sources Roadmap component projects will run in parallel with the aforementioned detailed acquisition and implementation planning activities.
  - Considerable procurement and/or system development activity is expected in fiscal year 2018.

Supporting artifacts were developed to help craft the Roadmap and set the stage for its implementation; these artifacts were developed with significant input from the CETs and the PDO workgroup. These supporting artifacts are included as Appendices to this document.

- **Appendix 1: Process Definition Document.** The Process Definition Document describes the seven functional areas and the forty-six business functions associated with these functional areas reviewed by the CETs in development of the Functional Capability Matrix.

- **Appendix 2: Functional Capability Matrix (FCM).** The FCM captures the functionality that information technology needs to supply, based on the deliberations across all CETs, for the Integrative System to be successfully implemented. The FCM captures statements of desired functionality, not requirements or specifications that a particular information system or vendor needs to meet. Examples of such statements are:
  - Ability to build a single, comprehensive service/case plan for a specific client;
  - Ability to track the delivery of every service associated with a single service/case plan;
  - Ability to calculate payment for a particular service in accordance with provider agreement T&Cs, service information and other pertinent rules;
  - Ability to identify potential instances of fraudulent activity based on algorithm application; and

- Ability to build 'data cubes' that enable evaluation of specific programs based on metrics across multiple performance dimensions.

Functional capability expectations are grouped in the FCM based on the seven functional areas shown in Figure 1, Business Function Framework Used To Develop The Roadmap on page 3:

1. **Client eligibility and enrollment:** program eligibility determination, enrollment and intake including capture of application and demographic information and periodic and event-driven redetermination and status changes.

2. **Provider management:** including application intake, processing including verification and "credentialing", contract/agreement setup and changes, and maintenance of the contract throughout its "life cycle". A provider can be an FCHHSS staff person (e.g. a Public Health Nurse) or external to the FCHHSS (e.g. a contracted community based organization).

3. **Service needs management:** assessment, identification and planning including capture of relevant information and the analytics required for these purposes.

4. **Service delivery management**: management of service plans, including service authorization management; capture of service information; continuous evaluation of service plan effectiveness and costs; service coordination both within and across service lines; and, client and provider interaction management issues including tracking of these interactions and capture of interaction information as part of a consolidated client record/file.

5. **Financial management** including provider compensation management, client reimbursement or benefit payment management, funds management and interfaces to FOCUS, the County's enterprise resource planning system.

6. **Program integrity management** processes ensure compliance, efficiency, and accountability within the FCHHSS by both detecting and preventing fraud, waste and program abuse, and by ensuring that providers and clients are compensated and receive benefit payments, respectively, in accordance with program rules. This functional area also includes investigative, cost avoidance and recovery/ recoupment activities.

7. **Performance management** including analytics and related reporting for monitoring and evaluating the effectiveness of FCHHSS programs and providing essential inputs to FCHHSS planning and budgeting processes.

The FCM also includes a "general" category that includes functionality expectations not specific to a particular functional area.

- **Appendix 3: IT Architecture and Management Matrix (ITAMM).** The ITAMM accounts for factors that are not specific to IT solution functionality but are nonetheless critical to their successful use:
  - The solution's architecture and the extent to which it is aligned with County preferences
  - The solution's ability to interoperate and exchange data with other info systems
  - The solution's user access modalities (e.g. can the solution be accessed via mobile device with little if any loss/degradation of functionality or loss of usability)
  - The solution's usability as measured by user satisfaction with the solution's capabilities and user

experience
    - The solution's manageability – the extent to which changes to the solution can be made easily and rapidly
    - The solution's supportability – the quality and responsiveness of the team responsible for supporting the solution
    - The solution's security and access management model
    - The solution's data and document management model particularly in support of interoperability, data exchange and information security
    - Expectations re: the solution's performance and availability
    - The solution's inherent support of audit and compliance activities

  Given that the Roadmap calls for multiple initiatives and is likely to involve one or multiple vendors, the ITAMM also includes expectations around:
    - Key vendor personnel
    - Approach to implementation
    - Approach to conversion
    - Approach to testing
    - Approach to issue/problem management
    - Approach to end user support
    - Approach to training and knowledge transfer
    - Approach to solution maintenance/hosting

- **Appendix 4: Barriers, Aids and Countermeasures Matrix.** This document synthesizes key learnings from:
    - HMA's experience leading major IT projects with federal and state agencies;
    - Past FCHHSS IT initiatives as shared by CET and PDO workgroup members; and
    - The aforementioned Health and Human Services IT Showcase.

  In this matrix,
    - A barrier is a potential obstacle to implementation of Roadmap initiatives;
    - An aid is an existing initiative, artifact or condition that, if properly leveraged, can help address the specific barrier; and
    - A countermeasure if an action that should be undertaken, in the absence of or in addition to aids, to address the specific barrier.

  This matrix addresses the following types of barriers:
    - Legal/regulatory
    - Funding
    - Procurement/acquisition management
    - Initiative prioritization, sequencing and pace
    - Initiative focus and championing/leadership
    - Project management
    - Resource management
    - Vendor management
    - Change management

- **Appendix 5: Commonwealth Information Systems Matrix**. A key consideration in the development of the Roadmap was to document the extent to which Commonwealth information systems are currently used in support of various FCHHSS functions. This matrix clarifies the use of more than 40 Commonwealth information systems and the rationale behind their use by FCHHSS staff and providers. This matrix sets the foundation for discussions which will need to occur with various Commonwealth agencies – thereafter referred to in this document as Commonwealth Engagement - to establish future uses of these systems and the degree to which the Commonwealth will collaborate with FCHHSS on information sharing.

- **Appendix 6: Information Access, Sharing and Use Legal/Regulatory Matrix.** Related to the latter but also in order to determine the legal and regulatory boundaries to information access, use and sharing across the FCHHSS, the purpose of this matrix is to clearly establish how federal and Commonwealth laws and regulations govern who and how certain information can be accessed, used and shared and the associated client consent requirements. These parameters are documented in this matrix, which covers federal laws and regulations including:
    - The Health Insurance Portability and Accountability Act (HIPAA), which regulates health information.
    - 42 CFR Part 2, which regulates information specific to substance use disorders and related federal programs.
    - The Family Educational Rights and Privacy Act (FERPA) which governs the management of student information.
    - Title 24 CFR Part 576 and Part 578 which governs information associated with homelessness prevention programs.

  This matrix also covers Commonwealth laws that govern the management of domestic violence, juvenile justice, Comprehensive Services Act, child welfare, child protective services and other human services program information. Finally, this matrix describes the parameters associated with meaningful, informed client consent – a critical factor for enabling many of the client data elements captured and/or used by FCHHSS agencies to be accessed and shared.

- **Appendix 7: Reviews of Existing FCHHSS Information Systems.** A team comprised of HMA and DIT subject matter experts conducted reviews of over 40 information systems currently in use across the eight FCHHSS agencies. These systems were deemed to be the most critical, aside from Commonwealth systems, to the operation of these agencies. The detailed observations for each system from the reviews are primarily intended for use during detailed acquisition and implementation planning activities.

  The information systems that were selected for review were included in the review because of one or more of the following reasons:
    - They are being used across multiple programs or agencies;
    - They have potential for growth (i.e. use beyond current);
    - During the course of discussions with CET members, they were identified as having major usability, maintainability/supportability and cost of ownership issues; and
    - They could be replaced with technology solutions which the county already owns.

  The review of these information systems covered:
    - The extent to which these systems are actually delivering the functionality for which they were

built/acquired;

- The system's usability as measured by user satisfaction with the system's capabilities and user experience;
- The system's ability to integrate/interoperate with other information systems;
- The system's manageability, the extent to which changes to the systems can be made easily and rapidly;
- The system's supportability, the quality and responsiveness of the team (internal and/or vendors) responsible for supporting the solution; and
- The system's security and access management model, the extent to which user access to a system can be regulated and tracked and data integrity can be ensured.

Conclusion

It is important to reiterate that the Roadmap is inherently iterative: it will evolve and become more detailed and prescriptive once:

- Acquisition strategies are established for the various components of the target architecture. Acquisition strategy decisions will be based on:
    - Exploring various options for acquiring desired functionality: build; buy/County hosts; buy/vendor hosts; and leverage functionality from other counties/jurisdictions.
    - Accounting for the advantages and drawbacks of various acquisition options based on time to implement, cost to implement and desire for modularity as opposed to working with fewer solutions/vendors.
- Commonwealth engagement activities are completed; the outcome of these discussions will determine the extent to which the FCHHSS will be able to consolidate certain functionality and both feed and take feeds from Commonwealth systems as opposed to the less attractive and efficient approach of entering data into Commonwealth systems.
- Options for phasing implementation of certain components and sun-setting existing information systems are examined. For instance, implementation of a consolidated business component may be phased by first transitioning the functionality of a less advanced or more vulnerable existing system and using this initial transition as the “pilot” or “testbed” for transitioning other systems.

EXHIBIT 1. FCHHSS INTEGRATIVE SYSTEM TARGET ARCHITECTURE REFERENCE DIAGRAM

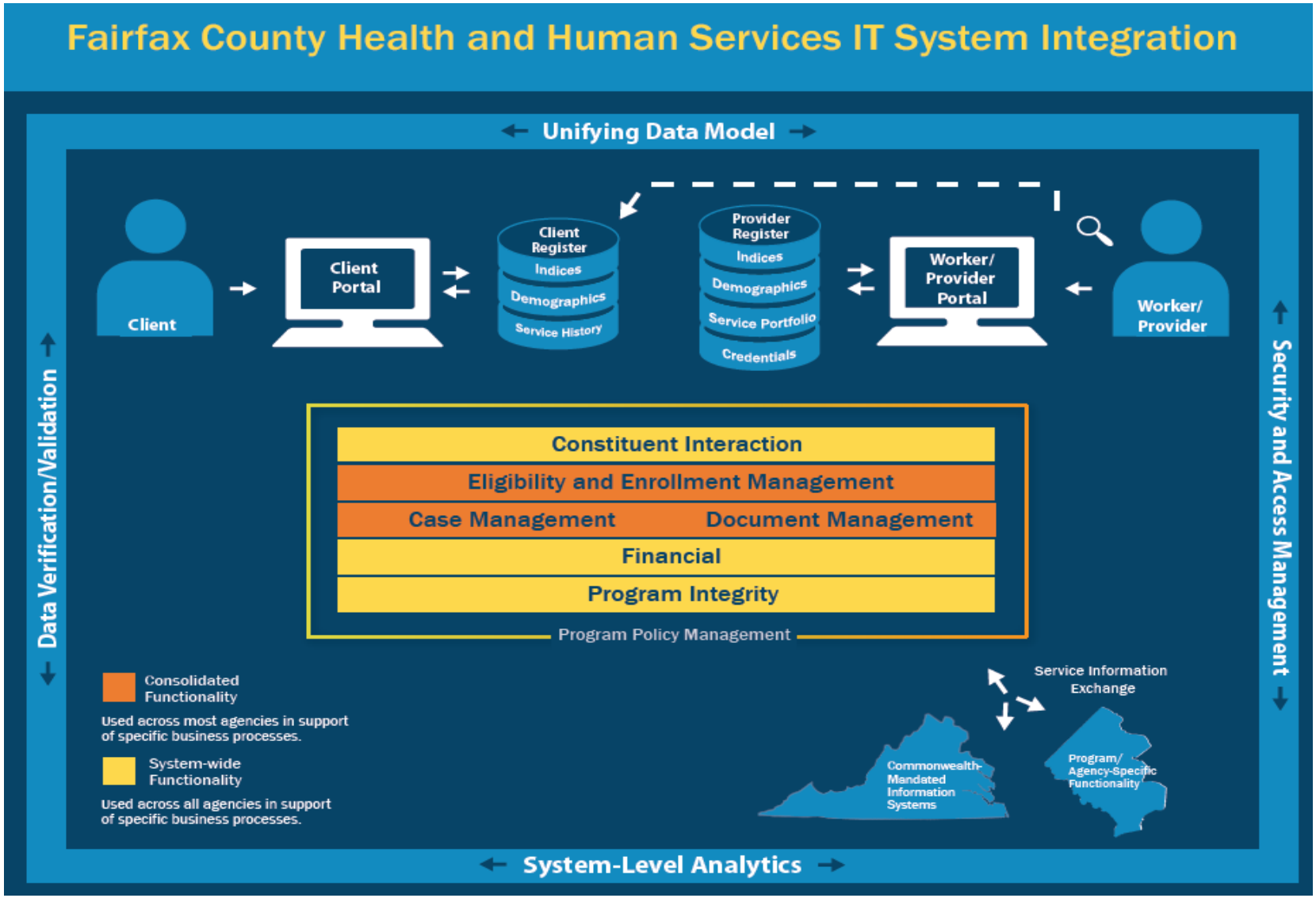


EXHIBIT 2. FCHHSS IT ROADMAP COMPONENT TABLE

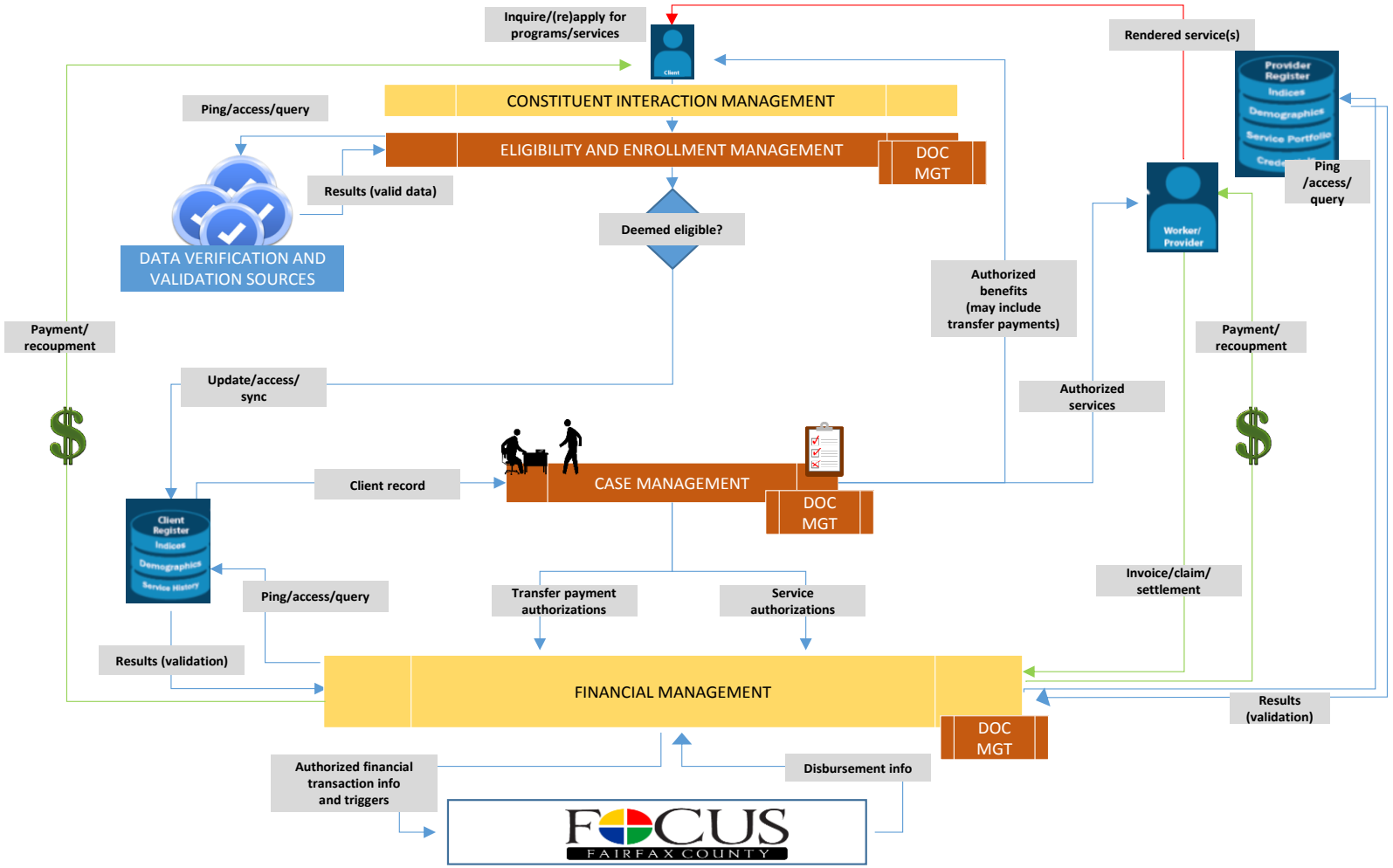
Component	Description	Examples/ Precedent
Foundation Laying Components		
FCHHSS Integrative System unifying data model	A universally and consistently applied set of definitions and uses for particular data elements as well as the relationships amongst the elements	FOCUS data model Allegheny County (Pennsylvania) San Diego County (California)
Data verification/ validation sources	Identify and secure agreements for access to authoritative sources of critical information used to process FCHHSS transactions, including but not limited to, eligibility determination and provider payment processing/claim adjudication	Federal Data Hub SOLQ (SSA – SSN) SAVE (DHS - citizenship/ legal status)
Business Functionality Components		
Client portal	• Multi-channel access to authoritative information about FCHHSS programs/services • Ability to transact electronically; functionality added progressively	Access NYC
Provider portal (part of Worker/Provider Portal)	• Multi-channel solution for external providers to access authoritative information about FCHHSS programs/services and access "domain-specific" information systems in real time, based on roles and rules • Ability to transact electronically; functionality added progressively	Medicaid Health insurance companies
Worker portal (part of Worker/Provider Portal)	• Solution for workers to do "one-stop shopping" for data and access "domain-specific" information systems in real time, based on roles and rules • Workers can be inside and outside of the FCHHSS (e.g. Fire/Police/ Sheriff): the worker portal is the *gateway* for workers to access information and functionality, based on "doors" and "keys", in the various other Integrative System functionality components.	New York City Worker Portal
Client register	Single "database" that contains authoritative information about a FCHHSS client, including a "light" record of services for which the client is eligible/enrolled in addition to services	New York City

Component	Description	Examples/ Precedent
	provided by/encounters with the various FCHHSS programs and providers.	
Provider register	Single "database" that contains authoritative information about FCHHSS providers, including: • Details re: contract/agreement terms and conditions • Credentials • Capacity • Portfolio/scope of services they can offer (including services they are authorized to offer under existing FCHHSS programs) • Service locations and other characteristics that matter to FCHHSS clients and case managers (e.g. languages spoken).	New York City Allegheny County
System-wide constituent interaction management	Technological mechanism for capturing and codifying client and provider interactions with the FCHHSS, enabling interactions to be initiated and/or conducted using various media (e.g. phone, text, email, chat), and when applicable "pushing" relevant information. Customer relationship management (CRM) solutions are generally used for this purpose.	San Diego County New York City Dynamics CRM (Fairfax County-owned IT asset)
Consolidated eligibility and enrollment (E&E) management	Single component that will support eligibility determination for any FCHHSS program for which Commonwealth systems are not employed. Ideally this component could take in feeds from Commonwealth systems and be interfaced to verification/validation data sources.	Most states (VA: VA-CMS)
Consolidated case management	Technological mechanism for: • Capturing and tracking caseload for particular programs • Generating, routing and fulfilling requests for services • Accessing the status of said requests • Recording and codifying the resolution of said requests and related follow-up/assessment of service delivery and associated quality and outcomes Includes the application of logic/rules for automating/ facilitating/expediting the routing of case manager tasks and referrals.	New York City Allegheny County Camden County, New Jersey Dynamics CRM (Fairfax County-owned IT asset)

Component	Description	Examples/ Precedent
Consolidated document management	Technological mechanism for: • Capturing, organizing, indexing and storing documents • Facilitating retrieval of and access to said documents • Linking said documents to structured data records in multiple information systems • Maintaining templates of formal communication documents (notices, remittance advices, explanation of benefits, etc.) • Generating formal communication documents based on rules as triggered by transactions initiated and processed in other components (e.g. E&E, case and financial management)	San Diego County Allegheny County OpenText (Fairfax County-owned IT asset)
System-wide financial management	Solution(s) that comprise a single component that interfaces with FOCUS and supports all FCHHSS financial management functions short of actual issuance of payments/disbursement of funds including: • Processing provider claims/invoices/bills • Authorizing benefit transfers to clients • Accepting payments from clients • Cost allocation management • Reporting of use of grant funds by specific entities • Cost settlement/payment reconciliation with certain providers	Medicaid (Medicaid Management Information System/MMIS) Health insurance companies (health plan information systems)
System-wide program integrity management	Solution(s) that support: • Proactive detection of fraud and abuse • Management and documentation of investigative activity	Medicaid (Fraud and Abuse Detection System/FADS)
System-level analytics	Functionality that supports the following across all FCHHSS agencies and programs: • Data accumulation/aggregation • Data transformation • Multidimensional analytics and modeling • Visualization, presentation and push	Allegheny County San Diego – Knowledge Integration Program

Component	Description	Examples/ Precedent
Technical Functionality Components		
Service information exchange	Technological mechanism(s) for requesting, retrieving and routing client data, provider data and service/encounter records from various data sources across the FCHHSS and potentially with entities outside of the FCHHSS based on trust relationships and conforming with consent rules, Federal, Commonwealth and County laws and regulations.	Health information exchange (HIE) service organizations (examples: CRISP-Maryland, KeyHIE-Pennsylvania, Pima County-Arizona)
Program policy management	Technological mechanism, usually referred to as a "business rules engine", for articulating, generating and storing program policies in the form of rules that IT solutions can "read" and apply. "Plugged into" other technical components.	New York City Allegheny County Biztalk (Fairfax County-owned IT asset)
Security and access management	Technological mechanism for capturing, storing, applying and when applicable enforcing rules that govern IT solution user access to certain information. In the context of FCHHSS, this also includes capture, application and enforcement of client consent. "Plugged" into service information exchange and, potentially, the County's Active Directory structure.	CRISP KeyHIE Pima County

EXHIBIT 3. FCHHSS IT ROADMAP SYSTEM AND DATA FLOW REFERENCE DIAGRAM



SYSTEM-WIDE FUNCTIONALITY — Functionality used across **all** FCHSS agencies in support of specific business processes

CONSOLIDATED FUNCTIONALITY — Functionality used across **most but not all** FCHSS agencies in support of specific business processes: mandated Commonwealth (or federal) systems and highly specialized info systems will also be used in support of these business processes

Data flows | Service flows | Financial flows

EXHIBIT 4. ROADMAP IMPLEMENTATION PLAN