Report from the Study Panel on Health Insurance Exchanges created under the Patient Protection and Affordable Care Act

Establishing the Technology Infrastructure for Health Insurance Exchanges Under the Affordable Care Act: Initial Observations from the "Early Innovator" and Advanced Implementation States

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GLOSSARY OF ABBREVIATIONS

ACA	Affordable Care Act
APTC	Advanceable Premium Tax Credits
BHP	Basic Health Plan
CALT	Collaborative Application Lifecycle Tool
CCIIO	Center for Consumer Information and Insurance Oversight
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare and Medicaid Services
COTS	Commercial Off-The-Shelf
CRS	Cost Sharing Reductions
DHS	Department of Homeland Security
DSH	Data Services Hub
FFE	Federally-facilitated Exchange
FPL	Federal Poverty Level
HHS	Department of Health and Human Services
IA	Interagency Agreements
IAP	Insurance Affordability Program
IAPD	Implementation Advanced Planning Document
IRS	Internal Revenue Service
IT	Information Technology
JAD	Joint Application Design
MAGI	Modified Adjusted Gross Income
MDM	Master Data Management
MITA	Medicaid Information Technology Architecture
MOU	Memoranda of Understanding
NAIC	National Association of Insurance Commissioners
NASI	National Academy of Social Insurance
QHP	Qualified Health Plan
RFP	Request for Proposal
SAAS	Software as a Service
SBE	State-based Exchange
SERFF	System for Electronic Rate and Form Filing
SNAP	Supplemental Nutrition Assistance Program
SSA	Social Security Administration
TANF	Temporary Assistance for Needy Families

In the wake of the U.S. Supreme Court decision affirming the constitutionality of the Affordable Care Act (ACA)[1], many states are reevaluating their planning and implementation efforts. One of the most time-consuming and challenging activities that states must consider is establishing the information technology (IT) infrastructure to promote access to and enrollment in affordable insurance plans through Health Insurance Exchanges (Exchanges) and Medicaid/CHIP programs. This paper focuses on the experience and key themes from some of the states most advanced in their ACA IT implementation.

To successfully implement health reform, states will need to develop IT systems that securely facilitate the movement of information in near real-time to provide consumers with answers about their eligibility for public health insurance benefits or tax subsidies, and enhance their ability to enroll in health insurance coverage. The Centers for Medicaid and Medicare (CMS) is also seeking to offer a high level of customer service to consumers by setting expectations that state eligibility and enrollment systems allow an individual to complete an online application and receive placement into a health insurance program within as little as 15 to 20 minutes.[2]

Building new or upgrading existing large scale enterprise technology systems to perform tasks required by the ACA presents major opportunities and challenges for states and the federal government. On one hand, there are unprecedented funding opportunities for states, such as grants for planning and establishment of new Exchanges, and new funding opportunities for modernization of existing Medicaid/CHIP systems development.

On the other hand, the enterprise IT work that has to be done to be in full compliance with ACA expectations is enormous. Most states will need to conduct major updates or complete replacements of their legacy IT systems and create new interfaces to link individual eligibility and enrollment data among Medicaid, CHIP, and the state's Exchange.[3] In many cases, a wholesale system replacement may be needed. And, during this process, states must also adopt a parallel strategy of modernizing and maintaining their legacy systems until everything can be transferred to the new.

The Center for Consumer Information & Insurance Oversight (CCIIO), part of the Centers for Medicare & Medicaid Services (CMS) within the Department of Health & Human Services (HHS), is the organization responsible for establishing the FFE and all Exchanges across the country.[4] Recognizing the significant IT challenges that states and the federal government face, CCIIO has provided substantial funding to so-called "Early Innovator" states to jumpstart and share their requirements and IT systems developed with all other states. Ultimately, three states — Oregon, Maryland, and New York — and a consortium of New England states led by Massachusetts have received funding from this initiative.[5]

CCIIO has also offered considerable flexibility for states that may not be prepared to operate their own State-based Exchange (SBE) by 2014. These options include operating an Exchange in partnership with the federal government (Partnership Exchange) or defaulting to a Federally-facilitated Exchange (FFE) run by the federal government.[6]

To promote the sharing of information in order to support implementation of the ACA, we interviewed policy and technology leaders from the Early Innovator states and other states that have made significant progress in designing and developing Exchanges and/or in modernizing Medicaid and CHIP eligibility systems. This report offers firsthand perspectives regarding these efforts and highlights key themes policymakers should consider as they plan to build and enhance their

1 National Federation of Independent Business et al. v. Sebelius, Secretary Of Health And Human Services, et al.,(2012).

2 Centers for Medicare & Medicaid Services, "Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 2.0," (2011).

3 Deborah Bachrach, Patricia Boozang, and Melinda Dutton, "Medicaid's Role in the Health Benefits Exchange: A Road Map for States," in A Maximizing Enrollment Report (Robert Wood Johnson Foundation, 2011).

4 The Center for Consumer Information & Insurance Oversight, Centers for Medicare and Medicaid Services, http://cciio.cms.gov/.

5 U.S. Department of Health & Human Services, "States Leading the Way on Implementation: HHS Awards "Early Innovator" Grants to Seven States," (2011).

6 Deborah Bachrach and Patricia Boozang, "Federally-Facilitated Exchanges and the Continuum of State Options," in Report from the Study Panel on Health Insurance Exchanges created under the Patient Protection and Affordable Care Act (National Academy of Social Insurance, 2011).

own state-based technology infrastructures to meet the ACA's deadlines and requirements; including:

- **Agreeing on a vision, strategy, and realistic plan for information technology development is essential for meeting fast-approaching implementation deadlines:** The advanced states all stressed the importance of coming to a shared, high-level vision for their IT systems that complements the governance, policy, and programmatic needs of the state. States also need to assess their ability to meet the 2014 deadline, realizing that a fully functioning SBE may not be completed until 2015 or later. States that cannot meet this deadline can choose a phased approach and become a certified SBE in future years.

- **Determining a state's information technology approach requires a careful assessment of internal and external resources:** All states interviewed began their development process by carefully examining the capabilities of their existing IT systems — especially those in need of extensive updates or complete replacement — and the ability of current staff to create and/or oversee the IT systems necessary to implement health reform. Tight timelines, CMS requirements, risks of failure, and opportunities for reuse have caused most states interviewed to significantly rely on procuring "commercial off-the-shelf" (COTS) components and services from systems integrators.

- **Navigating policy and technology integration between an Exchange and a state's Medicaid and CHIP programs is a complicated and pressing challenge:** Despite the guidance provided in the ACA and subsequent regulations, states face significant policy decisions across Exchange, Medicaid, and CHIP activities which are at the heart of health reform. Our interviews indicate that the technology development that must support the implementation of these reforms is one of the most significant challenges and an immediate priority for states. Most states interviewed have focused their initial efforts on the integration of eligibility and enrollment functions between the Exchange, Medicaid, and CHIP systems. It should be noted that even states that choose not to expand Medicaid are still required to meet all aspects of the ACA, including designing seamless eligibility systems to serve the needs of the Exchange, Medicaid, and CHIP populations.

- **Leveraging federal resources, reusing technologies developed by other states and federal agencies, and participating in multi-state collaboratives may accelerate development and help minimize operational costs:** In order to control costs and accelerate project timelines, states are exploring opportunities for aligning, leveraging, and coordinating the unprecedented resources available for Exchange and Medicaid/CHIP IT development. Advanced states are also actively exploring the potential to reuse knowledge and IT components developed by other states, the federal government, and commercial software companies. CMS is encouraging states to share and reuse at all levels — for example, by forming multi-state collaboratives so several states might share in the development, deployment, and system-hosting costs.

- **In order to meet deadlines, Exchange implementation efforts must proceed apace, despite federal and state policy, technology, and political uncertainties:** The deadlines for creating an Exchange and modernizing existing Medicaid/CHIP eligibility systems to comply with the ACA have been established, yet many state and federal policy and technical decisions are still being determined. Most states are taking a phased approach to Exchange and integrated eligibility system development by planning to meet core insurance functionality for the 2014 deadline and expanding to broader functionality and additional health and human service programs in subsequent phases. States also have the option of starting out with the FFE or Partnership Exchange and, over time, ultimately obtaining certification as an SBE.

Interviews with states that have made the most progress in designing their Exchanges and/or modernizing their Medicaid and CHIP eligibility systems have confirmed that meeting the technical challenges and deadlines for establishing ACA-compliant IT systems provides unique opportunities as well as significant challenges for all states, even to those considered to be leaders in this field. Regardless of the approach — SBE, Federally Facilitated Exchange, or Partnership Exchange — states would be well advised to seek out the Early Innovators and other advanced states to ask about lessons learned, to understand successful practices, to share artifacts and products, and to explore opportunities for collaboration to accelerate their own development efforts and to better control short and long-term operational costs.

OVERVIEW

On June 28, 2012, the Supreme Court issued a landmark decision upholding the constitutionality of the Affordable Care Act (ACA), effectively ruling that Congress has the power to require most Americans to maintain "minimum essential" health insurance coverage or face a "shared responsibility payment" to the federal government. The Court also left intact all aspects of the law regarding Medicaid — with one exception. The Court ruled that Congress cannot condition states' existing federal Medicaid funding based on the ACA requirement that they expand Medicaid programs to cover non-elderly adults who fall under 133 percent of the federal poverty level threshold (FPL).[7] The Court's decision does not affect any other provisions of the ACA.[8]

Despite the contentious debate and years of legal and political uncertainty — which will undoubtedly continue through the November 2012 elections — the Court's decision upheld the major pillars of health reform, including the creation of Exchanges, as well as virtually all other ACA provisions related to Medicaid. These provisions include requirements for state Medicaid agencies to provide a seamless, streamlined, and technology-enabled Modified Adjusted Gross Income (MAGI) eligibility determination experience that is integrated with an Exchange.

7 National Federation of Independent Business et al. v. Sebelius, Secretary Of Health And Human Services, et al., (2012).

8 Marilyn Tavenner, "Letter to the Honorable Robert McDonnell - Republican Governors Association," (Centers for Medicare & Medicaid Services, 2012).

As a result of the Supreme Court's decision, more states are re-examining state requirements and funding opportunities for implementing the ACA, particularly through the lens of associated implementation deadlines. Of all the ACA implementation threads that are involved in implementation, IT infrastructure development is perhaps the most challenging.[9] Development of IT systems for public programs typically takes years. As a result of the ACA's requirements and tight deadlines, both the federal and state governments are developing IT systems simultaneously, in mere months, often in advance of key policy decisions.

In order to promote the sharing of information, and to support successful implementation of the ACA, we interviewed policy and technology leaders in the Early Innovator states and other states that have made significant progress in designing Exchanges and/or in modernizing their Medicaid/CHIP eligibility systems. This paper offers firsthand perspectives regarding these efforts and highlights issues policymakers should consider as they plan to build and enhance their own state-based IT infrastructures to meet the ACA's deadlines and requirements.

9 Patrick Holland and Jon Kingsdale, "Health Benefit Exchanges: An Implementation Timeline for State Policy Makers," (Robert Wood Johnson Foundation, 2010).

INFORMATION TECHNOLOGY OPPORTUNITIES AND CHALLENGES

Information Technology Requirements of the Affordable Care Act

States have a number of options for Exchange implementation. These include (1) establishing and operating their own State-based Exchange (SBE); (2) operating an Exchange in partnership with the Federal government (Partnership Exchange); or (3) defaulting to a Federally-facilitated Exchange (FFE) run by the federal government.

The ACA and subsequent rulemaking outline the structural parameters for SBEs and provide a minimum list of six core functions that Exchanges must perform, including (1) eligibility determinations for qualified health plans (QHPs) and Insurance Affordability Programs (including Medicaid/CHIP and advance premium tax credits); (2) plan enrollment; (3) plan management; (4) consumer assistance; (5) financial management, and (6) oversight and reporting.

The goal of the ACA is for states to implement a "no wrong door" approach for consumers to access health insurance. This requires Exchanges and state Medicaid/CHIP agencies to establish a single integrated process to determine consumer eligibility for all federal subsidies and to facilitate enrollment into coverage for those programs. This requires Medicaid/CHIP and Exchange eligibility systems that can handle real-time eligibility and enrollment transactions. Integrating the Medicaid/CHIP eligibility process into the Exchange may reduce the administrative costs for performing those functions.[10] Beyond eligibility, all of the Exchange core functions will require and benefit from appropriate information technology infrastructure.

According to CCIIO's guidance, as published in August 2012 in Blueprint for Approval of Affordable State-based and State Partnership Insurance Exchanges, states seeking to operate an SBE or electing to participate in a State Partnership Exchange, ready to offer coverage for 2014, have until November 16, 2012 to submit an Exchange Blueprint for the January 1, 2013 deadline. The Blueprint will lay out how the state will meet all legal and operational requirements associated with the model it chooses to pursue.[11]

Specifically, states need to attest that their "technology and system functionality complies with relevant HHS information technology (IT) guidance." Similarly, states looking to meet these deadlines in subsequent years must submit an Exchange Blueprint under the same exact process and timelines (e.g., November 18, 2013, for plan year 2015; November 18, 2014, for plan year 2016).[12]

Affordable Care Act Information Technology Opportunities

The ACA and supporting federal funding sources offer an incredible opportunity to update legacy Medicaid and CHIP eligibility systems, improve newer systems, and create Exchanges that improve the experiences of residents seeking health insurance coverage in a state. There are also opportunities to align these efforts with state Health Information Exchange (HIE) efforts, by leveraging a number of shared technology services, including security, identity management, and master data management.

To support ACA implementation, the Center for Consumer Information & Insurance Oversight (CCIIO), part of the Centers for Medicare & Medicaid Services (CMS) within the Department of Health & Human Services (HHS), is responsible for establishing Exchanges. CCIIO has provided substantial funding to so-called "Early Innovator" states to jumpstart and share technology developments with other states. While originally funding seven grants, three states — Oregon, Maryland, and New York — and a consortium of New England states led by Massachusetts are using this funding to develop IT components for Exchanges and for modernizing Medicaid/CHIP eligibility systems. This work is being done in collaboration with federal partners, with the potential for reuse by other states.[13] Kansas, Oklahoma, and Wisconsin returned their Early Innovator funding after it was awarded.

In addition, the federal government has provided extensive federal grants to all states to build Exchanges — including Planning Grants and Establishment Grants (both Level 1 and 2) — to fund planning, development, and in some cases, initial operation of Exchanges. Recently, CCIIO announced that it will provide states with 10 additional opportunities to apply for Level 1 and 2 Establishment Grants. As states plan to take advantage of these funds, it is important to consider the following:

- Level 1 grant funds are available for up to one year from the date of award. States may apply for multiple Level 1 grants.
- Level 2 grant funds are available for up to three years from the date of award. States can only apply for one Level 2 grant.
- This funding is available regardless of whether a state plans to establish an SBE or State Partnership Exchange — or to prepare state systems for the FFE. Funding is also available for transitioning from a State Partnership Exchange or FFE to an SBE.

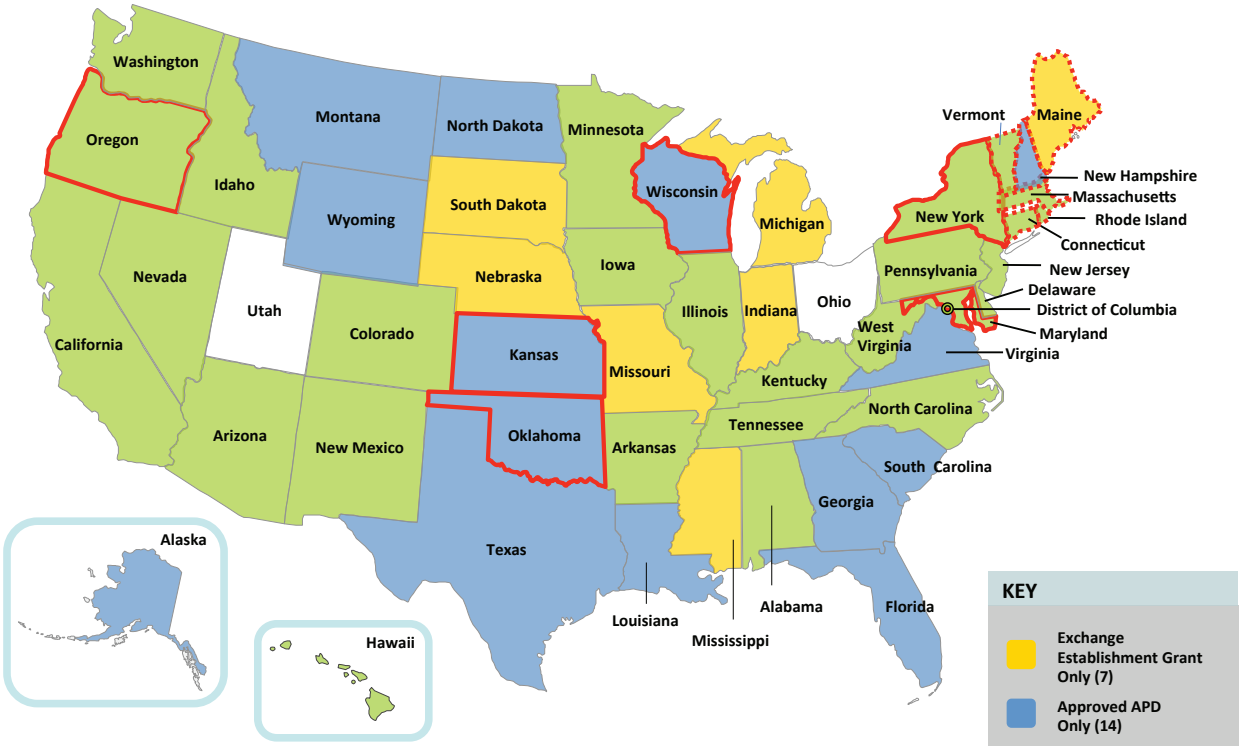
10 Deborah Bachrach, Patricia Boozang, and Melinda Dutton, "Medicaid's Role in the Health Benefits Exchange: A Road Map for States," in A Maximizing Enrollment Report (Robert Wood Johnson Foundation, 2011).

11 The Center for Consumer Information & Insurance Oversight, "Blueprint for Approval of Affordable State-based and State Partnership Insurance Exchanges," (2012).

12 Ibid.

13 U.S. Department of Health & Human Services, "States Leading the Way on Implementation: HHS Awards "Early Innovator" Grants to Seven States," (2011).

Figure 1



- Exchange Planning, Establishment and Early Innovator Grants awarded through 8/23/12 and net of any returns: $1.78 billion
- CT, MD, NV, RI, VT & WA received both a Level 1 & 2 Exchange Establishment Grant
- APDs reflect Implementation Advance Planning Documents pending and approved through August 30, 2012 (AK, CT, GA, & WV have IAPDs pending with CMS) and do not include Planning APDs pending and approved
- APDs Approved through August 30, 2012: $1.82 billion
- New England states received Early Innovator grant as a consortium lead by University of Massachusetts
- KS, OK, & WI returned Early Innovator funding

Source: Manatt Health Solutions

- These funds are available for states to use beyond 2014 as they continue to work on their Exchanges and do not require a state match.

- The last date for states to apply for these funds is October 14, 2014. Thus, it is imperative for states to apply for their Level 2 grants by this date.[14]

Furthermore, under revised regulation regarding the availability of enhanced federal funding, CMS will reimburse states for 90 percent of the costs related to the design and development of new Medicaid and CHIP eligibility systems through the Implementation Advanced Planning Document (I-APD) process. Similarly, states will also be reimbursed for 75 percent of the costs of systems maintenance and operations related to Medicaid, an important consideration for long-term sustainability since Medicaid transactions could potentially outnumber Exchange transactions. Such reimbursement rates represent a significant increase from the existing 50 percent federal reimbursement rates for Medicaid and CHIP eligibility systems.[15] Numerous states are in the process of seeking approval of funding for modernizing their Medicaid and CHIP eligibility systems. In total, almost every state in the nation is taking advantage of at least one of these various funding sources. See Figure 1 for a map of states and their funding to date.

Given the various funding streams that must come together to update and seamlessly integrate Exchange and Medicaid/CHIP IT systems, states will need to carefully adhere to the existing OMB Circular A-87 principles and standards for receiving and using federal grants. To encourage states to develop more

14 The Center for Consumer Information & Insurance Oversight, "Exchange Establishment Cooperative Agreement Funding FAQs," (2012).

15 Deborah Bachrach, Patricia Boozang, and Melinda Dutton, "Medicaid's Role in the Health Benefits Exchange: A Road Map for States," in A Maximizing Enrollment Report (Robert Wood Johnson Foundation, 2011).

integrated eligibility determination systems, a limited-time exception (expires December 31, 2015) to the cost allocation requirements set forth in OMB Circular A-87 (section C.3) allows federally funded human service programs — including the Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP) — to benefit from investments in the design and development of state eligibility determination functions being made by Exchanges, Medicaid, and CHIP.[16]

The OMB Circular A-87 exemption only applies if certain criteria are met. First, human service programs can only benefit from the investments being made by Exchanges, Medicaid, and CHIP if these costs would have been incurred anyway in the development of these IT systems. In addition, the IT systems that determine an individual's eligibility for health coverage must be operational and fully tested by summer 2013 and launched by January 1, 2014. Finally, any incremental costs for additional requirements necessary for human service programs must be charged to the benefiting program.[17]

In order for states to receive federal approval for enhanced funding for upgrades to Medicaid and CHIP eligibility systems, they must meet seven conditions and standards which aim "to foster better collaboration with states, reduce unnecessary paperwork, and focus attention on the key elements of success for modern systems development and deployment." These conditions include (1) modularity, (2) Medicaid Information Technology Architecture (MITA) alignment, (3) leverage and reuse within and among states, (4) industry standard alignment, (5) support of business results, (6) reporting, and (7) seamlessness and interoperability.[18]

As states take advantage of these funding opportunities, they must keep aware of funding dates and deadlines as they estimate and incur expenses for their efforts. Federal funds are finite, both in terms of timing and available dollars. States should be cautious when procuring available funding. Understanding all costs and setting realistic budget estimates assures that states are not surprised by vendor costs that are higher than projected — a situation that would leave them short of available funds once federal funding has been finalized.

Affordable Care Act Information Technology Challenges

Creating SBEs, Partnership Exchanges, an FFE, and/or modernized Medicaid and CHIP eligibility systems that are capable of performing the functions envisioned in the ACA will be a major IT undertaking for states and the federal government. Among other things, state IT systems are expected to support a first-class user experience — regardless of coverage type — that is facilitated by seamless coordination among several key stakeholders, including Exchanges, Medicaid, and CHIP, as well as health plans, employers, Navigators, brokers, and community-based organizations. States' systems must also ensure that information about coverage options is easily accessible and that enrollment is quick and accurate. CMS is seeking to offer a high level of customer service to consumers by setting expectations that Exchanges have eligibility and enrollment systems that allow an individual to complete an online application and receive placement into a health insurance program within as little as 15 to 20 minutes.[19] Historically, state IT systems have not been known for their "first class" user experiences, requiring states not only to push technology, but also to make business and operations more consumer friendly than ever before.

These expectations will require states to update their legacy technology systems and related processes, and create the interfaces to link individual eligibility and enrollment data among Medicaid, CHIP, and the Exchange.[20] These modernization efforts will be enormous for most states, as states today are using technologies that have long been retired in the private sector, such as COBOL. Most states will need a wholesale replacement with little that can be salvaged or a parallel strategy of modernizing—starting fresh and still maintaining the legacy system until everything can be transferred to the new.

16 U.S. Department of Health & Human Services, "Additional Guidance to States on the OMB A-87 Cost Allocation Exception," (2012).

17 National Conference of State Legislatures, "New Rules Allow Integration of Human Services Programs in Health Eligibility Systems: Limited Exemption to Cost Allocation," (2011).

18 Centers for Medicare & Medicaid Services, "Enhanced Funding Requirements: Seven Conditions and Standards," (2011).

19 Centers for Medicare & Medicaid Services, "Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 2.0," (2011).

20 Deborah Bachrach, Patricia Boozang, and Melinda Dutton, "Medicaid's Role in the Health Benefits Exchange: A Road Map for States," in A Maximizing Enrollment Report (Robert Wood Johnson Foundation, 2011).

States will also need to create new interfaces with the Federal Data Services Hub (DSH), which is the technical link from SBEs to federal data sources, to electronically verify citizenship and income, and to facilitate payment and reconciliation of advanceable premium tax credits and cost-sharing reductions (APTC/CSR) to individuals. These new interfaces will create massive efficiencies in a currently cumbersome and heavily manual eligibility and enrollment process.

Exchanges will also need to interface with state data sources — which in many cases will also require extensive upgrades — to verify information regarding state residency, income, incarceration status, etc. These systems will also need to facilitate the secure transfer of this information, in real-time, to provide consumers with answers about their eligibility for public health insurance benefits or tax subsidies, and enhance their ability to enroll in a health insurance plan. Successful Exchanges will rely on the Federal DSH, as well as their own state-based data sources, to obtain the data needed to facilitate these actions. These interfaces are necessary to ensure accurate eligibility determination. Even states choosing the FFE model will be required to implement IT systems to support data interfaces between a state's Medicaid and CHIP programs with the FFE.

All these data interactions and verifications must meet all security and privacy regulations for health and financial data. For those interfaces needed to verify eligibility, understanding state needs, addressing data accuracy and timeliness, and having a rules engine that prioritizes one data source over another is needed. In addition, these systems need to be accurate, even as individuals churn between income and eligibility categories. People cannot be denied coverage they are eligible for, nor be determined eligible for benefits or tax subsidies for which they do not qualify. Accuracy errors can cause significant issues for both states and individuals alike.

These large IT projects, especially for states seeking to be an SBE by 2014, require accelerated development approaches. Unfortunately, most large-scale IT projects — whether undertaken by public or private entities — have a history of taking longer and costing more than original projections. For Exchange development efforts, however, states must be aware of hard federal deadlines and plan accordingly. In addition, although the federal government is providing a number of funding sources to support states, funding is not limitless. As states work with vendors, the federal government will encourage reuse to increase efficiency and accelerate timelines.

The new IT systems are expected to have a significant impact on operations and work processes for eligibility determination and enrollment into health plans. Changes to fundamental work processes will require extensive training of both state agency staff and consumers. Underestimating the transformational nature of these changes on multiple constituencies could undermine technology development efforts.

Recognizing these challenges, the federal government is encouraging collaborative partnerships between and within the federal and state agencies charged with implementing health reform, as well as between the public and private sectors. Ultimately, it is the federal government's goal to use these collaborations to create shared services and IT components that can be used to meet the demanding timelines of the ACA and to minimize overall expense and risk.[21]

Based on our interviews with policy and technology leaders in Arizona, Maryland, Massachusetts, Oregon, New York, Rhode Island, and Washington, we have identified a number of key themes for states establishing their SBE.

21 Centers for Medicare & Medicaid Services, "Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 2.0," (2011).

Agreeing on a vision, strategy, and realistic plan for information technology development is essential for meeting fast-approaching implementation deadlines.

In order to best leverage the unique opportunities provided by the ACA, as well as meet its deadlines, states will need to create a shared and coordinated technology, business, and policy vision among multiple state departments and entities. Historically, large IT implementations are prone to delays and cost overruns. However, ACA deadlines require action and implementation by specific dates, creating a sense of urgency that only can be completed with a common vision, strategy, and realistic approach for implementation.

A core success criterion for states will be to clearly identify roles and responsibilities across the various state agencies and entities that will have to come to agreement on a common vision for development and operations of their Exchange. In some states, a successful practice has been to employ a project manager who reports to the heads of each applicable state agency (i.e., Department of Insurance, Medicaid, Social Services) and is ultimately in charge of bringing up the issues that must be enacted upon for a decision to be made. Thus, a single voice of the Exchange can be created. This is essential in providing effective direction to the IT and vendor teams tasked with designing and responsible for building the state's Exchange.

For instance, the Massachusetts Exchange (run by the Commonwealth Connector Authority) has collaborated extensively with MassHealth (the state's Medicaid and CHIP agency) in areas such as determining eligibility. However, since the state's efforts to implement health reform in 2006, these two agencies have remained separate and distinct. Nevertheless, as health reform implementation moves forward, these agencies have adopted a "single project approach" to coordinate development, procurement, and implementation of both Exchange and Medicaid/CHIP IT systems, including a single integrated eligibility system. The agencies have also created interagency agreements to define business ownership of specific technology components and roles as well as other governance structures to guide the process of Exchange development and operations. The University of Massachusetts Medical School — the recipient of Massachusetts' Early Innovator cooperative agreement — is acting as the project manager to support the design, development, and early implementation.

Our interviews with advanced states suggest that certain key governance, business, and policy questions are best addressed early on, before considering the technology infrastructure for a state-based exchange. Key questions include the following:

- Will the Exchange be housed within an existing state agency, new state agency, quasi-governmental agency, or nonprofit entity?
- Will Exchange systems be fully integrated with Medicaid, or operate separately from Medicaid systems with appropriate system interfaces?
- Will new Exchange and Medicaid technology be designed so they can support eligibility for other health and human service programs?
- Will the Exchange, Medicaid, and CHIP programs use identical approaches to plan selection, customer service, and premium billing?
- What is the vision or business model for sustaining the Exchange after development and initial operations?

While not all policy and business decisions may be answered or have direct impact on technical choices, understanding the broad policy direction of a state is important when considering the technological approach for an SBE. For instance, since the majority of citizens who gain coverage under health reform will likely be enrolled in Medicaid, this program represents the single largest potential source of Exchange funding over the long term.[22] Integrating Medicaid/CHIP into Exchange activities provides the opportunity to cover some of

22 Deborah Bachrach, Patricia Boozang, and Melinda Dutton, "Medicaid's Role in the Health Benefits Exchange: A Road Map for States," in A Maximizing Enrollment Report (Robert Wood Johnson Foundation, 2011).

the cost of development through Medicaid, and also to cover operational costs, supplying an important funding source for sustainability of a state's Exchange.

After roles and processes are solidified and basic governance questions are answered, states will need to focus on creating a realistic implementation plan. For instance, both Massachusetts and Maryland adopted a phased approach. The first phase of development will focus on supporting selected Exchange functions and MAGI Medicaid eligibility determinations, while future phases will support non-MAGI Medicaid eligibility determinations and integrate other social service programs. Currently, both of these states are working with technology vendors on phase one, which targets functionality for open enrollment by October 1, 2013.

CMS recognizes that if states have not already started the tasks above they are unlikely to meet the 2014 deadline — which requires a system ready for open enrollment by October 1, 2013. To assist states in that situation, CMS has offered them the opportunity to move incrementally towards becoming a fully operational SBE. Specifically, states can seek conditional approval of an SBE or start by creating a State Partnership Exchange that divides up functions with the FFE.[23]

States without an Exchange ready for operation on January 1, 2014, may apply to operate an SBE in 2015 or in subsequent years. In other words, a state may start out in 2014 with an FFE or Partnership Exchange and, over time, assume more responsibility for Exchange functions, ultimately obtaining certification as an SBE. States may find this phased approach to getting to an SBE more realistic based on the large technology implementation efforts required to establish an SBE.

Conditional certification allows states to buy more time to achieve certification if they are not fully ready in 2013. The State Partnership Exchange model also extends states' deadlines to 2014 or later. States that simply do not want to create a fully functional Exchange also have the option of dividing up some functions with the FFE. States should note Exchange approvals only happen once a year, so missing a deadline means a yearlong wait for approval. [24] See Figure 2 for the Exchange options states may choose for establishing an Exchange in their state.

It is important to note that states not operating their own SBE or State Partnership Exchange can still conduct their own eligibility reviews for Medicaid and CHIP as well as operate their own reinsurance program to protect insurers against risk in the Exchange.[25] In addition, states choosing an FFE will still rely on the DSH and have interactions with the FFE for the electronic transfer of data.

Most importantly, states should realize that no SBE will be perfect or have all aspects of the Exchange automated by the start of open enrollment. Continuous system improvements and additional functionality should be expected over time. States committed to establishing an Exchange should determine a realistic timeline for completing their technical build and work with the federal government on an interim plan to adjust those timelines as necessary.

Thus, SBE development will be an iterative process, in which October 1, 2013, does not signal the end of development but rather indicates the completion of one phase of a multi-phased effort to improve the health insurance purchasing experience for individuals, households, and small businesses.

Determining a state's information technology approach requires a careful assessment of internal and external resources.

All states interviewed began determining their IT approach by carefully examining the capabilities of their existing IT systems — particularly their Medicaid and CHIP eligibility systems — to meet the requirements of the ACA for real-time eligibility determination; such "as is" analysis is a requirement for receiving federal establishment grant funding for systems development.[26] While some states have made great strides in modernizing their eligibility systems, a recent survey from the State Health Access Data Assistance Center (SHADAC) notes that most states rely on older, legacy Medicaid and CHIP eligibility systems that lack the capacity to support the streamlined processes

23 The Center for Consumer Information & Insurance Oversight, "Blueprint for Approval of Affordable State-based and State Partnership Insurance Exchanges," (2012).

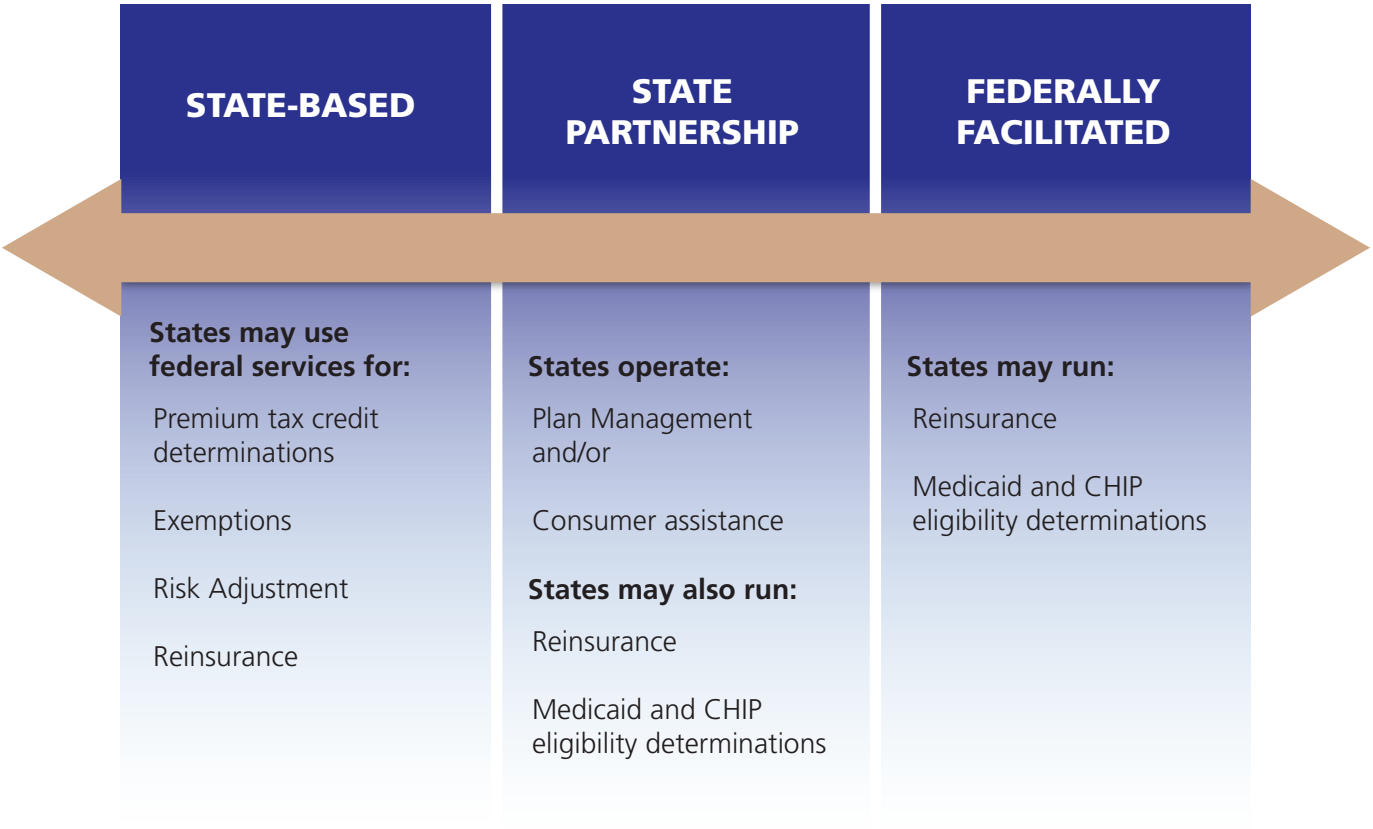
24 Ibid.

25 Ibid.

26 The Center for Consumer Information & Insurance Oversight, "Exchange Establishment Cooperative Agreement Funding FAQs," (2012).

Figure 2

EXCHANGE OPTIONS FOR STATES



called for under health reform. In fact, only five states studied report building their systems on a more flexible, Internet-based platform, and only one state was able to make eligibility determinations in real-time.[27]

States have also evaluated the ability of their IT staffs to create the systems necessary to implement health reform. States interviewed noted that hiring experienced IT staff was difficult due to budget constraints and complex state hiring practices that make it difficult to aggressively recruit and compete with the pay and benefits offered by the private sector. In addition, state IT staff often lack the expertise needed to implement certain software packages that form the core of Exchange development. For instance, Oregon is using outside consultants to both augment and train staff on the Oracle® platform being used to create its Exchange.

While many of the states that have taken the lead in Exchange development have a history of developing customized solutions and having state staff extensively involved in the design, development, and maintenance of their current IT systems, all states interviewed are procuring external services and resources as part of their overall IT approach.

Given the complexity of the build and the vast number of interfaces needed by an Exchange and related Medicaid/CHIP functions, most of the states interviewed have concluded that the development efforts need a dedicated IT team and are relying heavily on systems integrators to manage the overall IT development process.

States are also relying heavily on IT contractors and systems integrators, due to the demands of maintaining their current IT systems and their limited internal capacity for taking on additional projects.

27 State Health Access Data Assistance Center (SHADAC), "State Health Access Program State Medicaid Eligibility System Survey: Report on the Modernization of State Medicaid Eligibility Systems," (University of Minnesota School of Public Health, 2012).

This trend, in turn, is also causing vendors to become resource-constrained, raising concerns among states about their ability to attract the level of talent needed for their projects. As vendors commit to projects in some states, states engaging in procurements later in the process may find that there is limited vendor capacity to take on new initiatives.

Systems integrators can be procured to implement a range of solutions — from an unmodified, commercial off-the-shelf (COTS) software package to a completely custom, written-from-scratch program. Between those two extremes is a continuum of approaches that includes customized and/or configured COTS software, custom software built using commercial software frameworks and libraries, and complex systems comprising all of the above. This range of low-to-high customization usually correlates directly to three other aspects: cost, suitability, and time to deployment.[28] These and other issues, such as funding availability and ACA deadlines, should be carefully considered as states develop their IT approach. Our interviews revealed some of the perceived strengths and limitations to these general IT approaches:

Building a Custom Solution — Complete customization allows a state to design and develop an Exchange that fits its specific needs. Creating a custom-built Exchange can allow for unique state-specific policy goals and programs, specific interfaces with providers and state systems, and complete customization of the various user experiences.

Despite the potential advantage of a full custom build, states will find it difficult, if not impossible, to build a complete custom Exchange to meet ACA deadlines. States that take this approach will also unnecessarily "reinvent the wheel" by recreating many core Exchange functions that may have been designed or built similarly by vendors or in other states. In addition, this approach is not aligned with the "Leverage and Reuse" condition described in the Seven Conditions and Standards for Enhanced Federal Funding and reflects higher costs for both the states and the federal government.

Under this scenario, a state would also be responsible for all upgrades and maintenance as rules and policies change, thus requiring experienced IT staff or external IT consultants to continuously modify the system for technology upgrades and policy changes.

Buying a Commercial Off-The-Shelf Solution — A number of technology vendors report that they are in the process of developing complete Exchange packages that would require only customization for state-specific requirements. This option will theoretically allow for accelerated implementation, as the vendor could offer a product that is fully developed and complies with yet-to-be determined CMS requirements. These options could be hosted within a state or externally at an off-site location as a software as a service (SaaS) model. In addition, the vendor assumes responsibility for continued updates and upgrades to meet changing ACA requirements.

While vendor offerings may cover some of the functionality of an Exchange, states should review any proposed COTS solution to see if it meets their needs and accounts for ongoing and continuous policy changes. CMS is still in the process of defining requirements in key areas such as the Federal DSH specifications; identity verification and security requirements; the management of tax credits; and CMS recent release of the final Exchange Blueprint. As a result, systems should be flexible enough to accommodate these changes.

In addition, Medicaid integration is not a "one size fits all" approach; each state will have unique technical requirements. Furthermore, some of the vendor offerings to date have had limited, if any, deployment. Also, vendor lock-in and ongoing maintenance fees need to be considered. Thus, states need to review any proposed COTS solution that proposes to offer complete Exchange functionality.

As for reuse, while the code for this type of solution cannot be reused without another state choosing and acquiring the same solution, process flows and other output (such as state specific customizations) should be leveraged by other states that purchase the same IT solution.

28 Bruce F. Webster, "Buy vs. Build Software Applications: The Eternal Dilemma," (2008).

Leveraging Commercial Off-The-Shelf Tools — In between a fully customized solution and a completely functional COTS solution is a mixed approach leveraging various commercial tools and components to piece together a functioning Exchange and/or modernized Medicaid/CHIP eligibility system. This option allows for picking "best-in-class" components, such as rules engines, portals, and financial management solutions, to build a technology stack of components needed to implement the ACA.

Leveraging these tools allows for faster development compared to a fully customized solution, but more choice and flexibility than a complete COTS solution. Under this scenario, states — or their systems integrator vendors — will be required to manage the integration and seamlessness of the various products as policies and rules change. In addition, management of needed updates as a result of policy or programmatic changes will take some coordination across the implemented solution.

Most states interviewed have been using some level of COTS products. The hope that these states have is that procuring COTS products will gain a significant amount of mature functionality in their systems that has been well tested, without having to shoulder the burden of custom development for the entire system. These states hope to avoid reinventing the wheel which has already been invented and used with many other customers. For example, rules engines, customer relationship management (CRM), master data management (MDM), services and notifications, and workflow engines are just a few of the COTS components of a state's Exchange strategy that readily exist on the market today. These COTS tools can be reused as opposed to being custom built from the ground up and offer a state many advantages such as flexibility, access to best practices from other industries, and more extensive, refined functionality in less time than what it would get if it had built this on its own.

Moving forward, states should evaluate the strengths and weaknesses of each of these options as they relate to the capacity and vision for IT infrastructure for their particular needs. Primary issues to consider include time required for development, interoperability (i.e., the ability of the new system or components to work with existing state systems), inclusiveness of the solution (i.e., the licenses and systems necessary to support certain components), customization required, short- and long-term operational, support, and maintenance costs (and federal funds available to defer these), how much risk the state must assume versus the vendor, vendor track record and offerings to date, and ability to leverage reuse. Understanding the total cost of ownership of a chosen solution is important when choosing an option. States should also bear in mind that there are lessons to be learned, items for reuse, and opportunities for collaboration to be had with states that have already procured or are building a solution. Reaching out to these states can be helpful for determining the right approach for meeting an individual state's unique needs.

Regardless of the IT approach, states should take into consideration that state procurements are slow and complex processes. While Exchanges that are established as quasi-state entities or not-for-profits may have some additional flexibility, large state procurements involving multiple state agencies can take six months or more. Writing the Request for Proposals (RFP), getting it approved, posting it publicly, evaluating responses, hosting oral presentations, selecting a vendor of choice, and completing contract negotiations are lengthy processes requiring skilled and dedicated technical and legal staff. In addition, federal funding requirements obligate states to get approval of both their RFP and the final contract with the selected vendor before executing either.

Most of the states interviewed have taken longer than expected to work through the procurement process. As a starting place for their efforts to accelerate the process, states should consider looking at the work products of the advanced states for model RFPs, vendor evaluation tools, and contract terms and conditions. States may also consider issuing Requests for Information (RFI) or meeting with vendors to gather advice and learn about their offerings before they write their RFPs. States need to align RFP requests, with the preferred technical approach. While a state may want a service model approach, an RFP that requires significant on-site development that is traditionally used in the development of custom solutions conflicts with the state's preference. Requiring significant on-site vendor staff can add unneeded cost, as well as potentially limit reuse. Writing an RFP in a vacuum, without an

understanding of what other states are doing, or what is available in the vendor community, can limit the success of a procurement process.

States should ensure that the language in their RFPs proactively requires vendors to address reuse, leveraging assets from other state implementations, proactive identification of partnering opportunities, a phased approach, and leave the door open for shared services solutions. CMS has been actively providing states with technical assistance around procurement to ensure that states' procurements offer them the right balance of value with minimal risk but are not unduly constrictive or unattractive to vendors. For states still in the procurement phase, this becomes more and more critical as the ACA deadlines approach and their options wane. CMS is seeking to be a partner in state procurements, requiring certain terms and conditions within contracts, as well as identifying opportunities for reuse and savings. States should also communicate their progress with their CMS grant officers and Medicaid/CHIP systems leads, to prepare them for expected RFPs or contracts that require their review to accelerate the approval process.[29] See Figure 3 for a list of procurement activities states may need to accomplish when procuring an IT solution.

Once a vendor is selected, a state has an opportunity to negotiate the best value for the design, development, and maintenance costs of the proposed solution. Many advanced states have been procuring fixed-price contracts, as opposed to those based on time and materials. States should review what is included in the fixed-price proposal and be clear on what assumptions they are agreeing to for the fixed price. For example, if the vendor assumes 10 interfaces in its fixed price and the state knows of at least 20 interfaces, a costly change order may occur. Accordingly, states should carefully review all assumptions that are tied to the price and clarify or change those that seem unrealistic. Ambiguity in an RFP and a subsequent contract can create financial and time risks.

A vendor is only as good as the staff it employs. States should clarify the percentage of time staff are dedicated to the state's efforts and quickly lock in key staff to the project. Ideally, states should identify certain staff as key personnel and require consent for any changes to such personnel to avoid key staff being removed from the project without a state's consent. As described above, however, over-committing a vendor to a specific number of on-site staff can add cost and limit reuse. Staffing levels and locations need to fit the technical approach, those using COTS products should expect less on-site staff compared to traditional custom-built IT solutions.

States also need to consider issues of liability, contingency planning, and risk management when finalizing a vendor contract. States should feel comfortable with the sanctions for non-compliance of the contract, including the risk of not completing on time, as well as potential CMS or state sanctions for not complying with the lengthy and varied Exchange and/or Medicaid/CHIP eligibility system requirements.

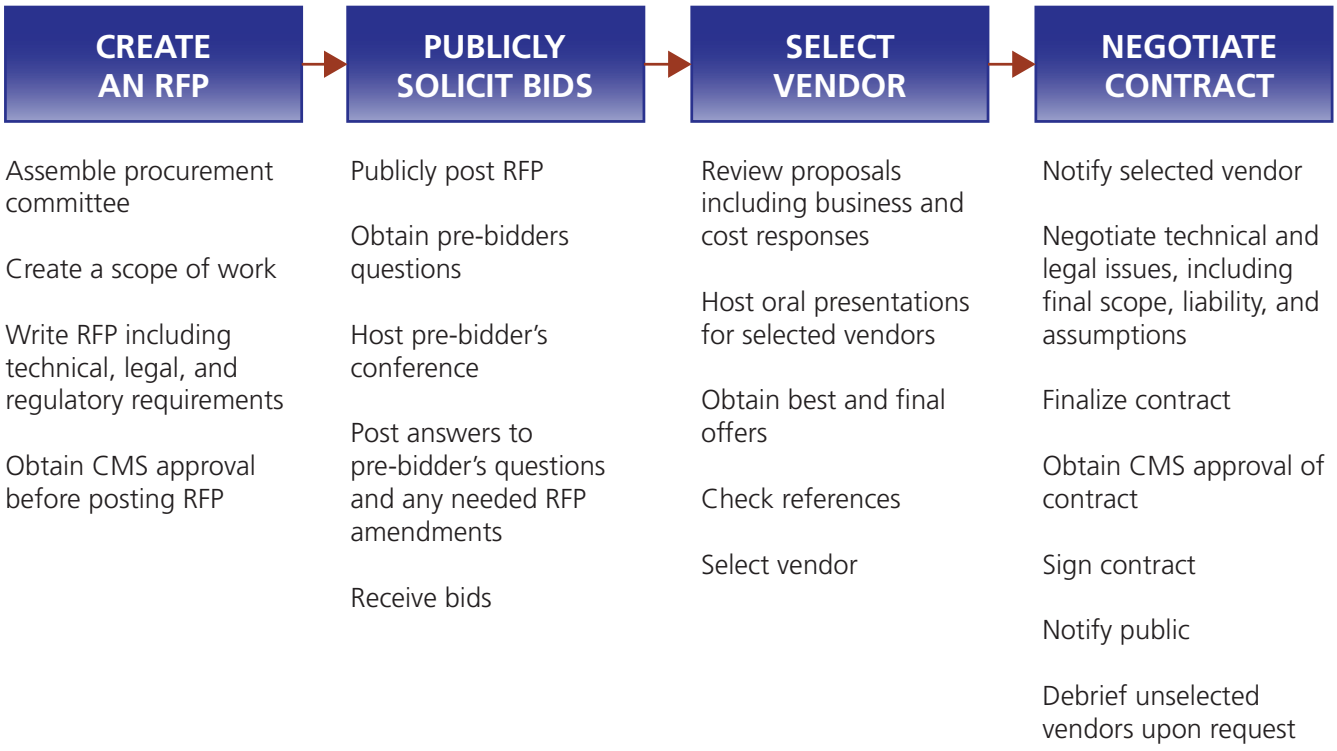
CMS has also proposed that states include specific reuse and ownership language in contracts with technology vendors to maximize sharing among states. A contract should focus on what is needed for day-one functionality and avoid unneeded customization, while specifically requiring reuse where applicable. A state should not have to pay for similar development work completed and paid for by another state. This concept of reusing technical components, as well as assuring best value, will be reinforced throughout the contract approval process that states will need to undertake to obtain federal funds.

Once a system is built, states need to consider operational readiness and on-going maintenance. States will need to continually build new or updated system capabilities according to their technology approach or changes in health policies — while at the same time managing the production environments that currently serve individuals and small businesses. Making sure that states have all the performance and monitoring tools, as well as staff or consultants, in place to ensure service levels are met and maintained will remain an ongoing challenge. Another ongoing challenge will be to assure that states have all the technical environments, resources, and policies and procedures to address bug fixes, product patches, and new functionality simultaneously. Finally, states need to manage the integration and data exchanges with legacy systems that are decommissioned over time. If not properly planned for and managed, these types of ongoing IT issues and challenges can potentially derail an Exchange.

29 Centers for Medicare & Medicaid Services, "Best Practices and Requirements in Contracting and Procurement for Exchange Information Technology Systems," (2012).

Figure 3

NAVIGATING THE STATE PROCUREMENT PROCESS



Determining the best IT approach will vary by state, based on legacy systems, state IT staff resources, and goals for policy and operations. No matter which option is chosen, states would be well-suited to identify opportunities for reuse, collaborate with CMS, and prepare the needed resources to support the procurement, build, and ongoing IT efforts for their Exchange.

Navigating policy and technology integration between an Exchange and a state's Medicaid and CHIP program is a complicated and pressing challenge.

The requirement that Exchanges coordinate the eligibility determination and enrollment for Medicaid, CHIP, and other Exchange populations (such as individuals eligible for APTC/CSR) in near real-time has made achieving both policy and technology integration among these entities the most immediate priority — and one of the greatest challenges — for states that are actively implementing health reform.

Exchanges and Medicaid/CHIP agencies may be faced with a number of challenges with coordinating and integrating eligibility. The type of Exchange governance structure — for example, existing state agency, new state agency, quasi-governmental agency, or nonprofit entity — can add complexity to decision making and ownership issues. In many states, including Massachusetts, the Exchange is a distinct entity separate from the Medicaid/CHIP program and has different goals and governance structures. Exchange and Medicaid/CHIP programs also may target different populations, including small businesses and individuals with different incomes. For instance, an Exchange may require certain comprehensive shopping functionality targeted at consumers who can purchase health insurance elsewhere, while Medicaid/CHIP may prioritize ease of use and simplified enrollment. These two agencies may also vary in their use of and connection with health plans, customer service, and other program functions. Despite these differences, focusing on shared eligibility, a "no wrong door" approach is essential, especially for controlling for

churn between programs for which individuals and families may be eligible as their income fluctuates over time.

A state's IT approach to its Exchange needs to take into account whether or not its Medicaid program will be expanded. Regrettably, states that do not expand their Medicaid programs could find the administration of the interface between their Medicaid programs and Exchanges much more complex when compared to those who do. Opting out of expanding a state's Medicaid program will also impact the Exchange's risk pool, increasing the volume of individuals who both qualify for and seek subsidized coverage through an Exchange.[30] However, no matter a state's decision on Medicaid expansion, all states need to convert to MAGI, because all of the Medicaid eligibility rules must be simplified and streamlined. Neither the Supreme Court ruling nor a state's decision of whether to expand Medicaid eliminates the need for a state to update Medicaid and CHIP eligibility systems, as required by the ACA.

Regardless of a state's decision to expand Medicaid, Exchange planning and development will require close integration and collaboration with the state's Medicaid and CHIP programs. While Exchanges and Medicaid are different programs in terms of the benefits and funding, there is a large overlapping population, which results in overlapping technology needs. For many states, drawing clear lines of distinction between their Exchanges and their Medicaid program may be difficult. The customer service implications alone for serving this population, much less the IT complexities, make this separation problematic. Even a state using a phased approach —using the FFE in the short-term — will require Medicaid and CHIP eligibility system upgrades.

For those states opting to rely on an FFE, the systems requirements for Medicaid and CHIP eligibility and Exchange integration are no less daunting. State Medicaid and CHIP agencies face implementation of the following ACA requirements:

- Transitioning to MAGI eligibility determinations
- Providing web and phone Medicaid application capacity
- Conducting electronic verification of attested eligibility information
- Assessing APTC eligibility for those applicants who appear ineligible for Medicaid
- Transferring that "account" to the FFE for QHP enrollment and effectuation of tax credits

These functions will require upgrades or replacement of legacy eligibility systems, as well as development of the interfaces necessary to connect seamlessly to the FFE.

There is no fallback option for states with regard to Medicaid and CHIP eligibility IT upgrades. All states will require some level of Medicaid and CHIP eligibility system improvements; these systems need to be able to determine MAGI eligibility in real-time, whether linked to an SBE or the FFE.

Thus, states implementing an Exchange must coordinate policy and implementation workgroups, including IT, across the Exchange and the Medicaid and CHIP programs to achieve overall integration with Exchange development efforts. If the Exchange part of an entity is separate from the Medicaid program, interagency agreements will need to be negotiated and implemented to determine who will ultimately make, develop, implement, and maintain the various technical components that make up the Exchange. Regardless of the model, collaboration through agreed-upon vision, goals, and governance is key.

Leveraging federal resources, reusing technologies developed by other states and federal agencies, and participation in multi-state collaboratives may accelerate development, help minimize operational costs, and maximize the likelihood of sustainability.

Since the passage of the ACA, the federal government has been working hard with states to ensure that they have the funding and IT resources necessary to build their Exchange and Medicaid/CHIP IT systems in a way that minimizes operational costs and maximizes the likelihood for sustainability.

30 Manatt Health Solutions, "Implications of the Supreme Court ACA Decision for the Medicaid Expansion," (2012).

First and foremost, the federal government has provided extensive federal grants and matching funds for Exchange and Medicaid planning, as well as development, maintenance, and operations. Recently, CMS announced that it will provide states with 10 additional opportunities to apply for Establishment Grants. This funding is available regardless of whether a state plans to establish an SBE or State Partnership Exchange — or to prepare state systems for the FFE. These funds are available for states to use beyond 2014 as they continue to work on their Exchanges.[31]

In addition to funding, the federal government is also promoting the sharing and reuse of the IT building blocks necessary to build SBEs and modernize Medicaid/CHIP eligibility systems. Reuse, stated simply, involves using previously created artifacts, code, software, or other products as a starting point for development. The extent to which IT components can be shared and reused is guided by the following three tiers of reusability:

Tier 1: Sharing documents, processes, and knowledge among the states.

Tier 2: Sharing IT code, libraries, COTS software configurations, and packages of technical components that require the recipient to integrate and update them for their state specific needs.

Tier 3: The broadest tier of reusability allows states to jointly procure hardware or software, as well as manage joint deployments. This could include solutions offered as SaaS or jointly hosted in a cloud environment.

Currently, Tier 1 reusability is the most common among the states. In fact, several states interviewed report leveraging other states' documents and artifacts, such as RFPs, which keep states from having to write these documents from scratch; this saves significant time and effort.

Tier 2 reusability has been less common, although a number of states are discussing and exploring the reuse of code and other technical deliverables. One of the Tier 2 areas likely to be reused most involves states using similar COTS products for their efforts. COTS solutions, by their very nature, have the potential to be reused by multiple states. Software vendors will generally update and improve their products as they get implemented and as new or updated federal guidance becomes available. For instance, our interviews indicate that three of the states using the same COTS product for their portal have been meeting to discuss their development efforts with this product. Another option, given that both CMS and vendors are still developing MAGI business rules, is that states could potentially reuse these rules to reduce costs and time. CMS has estimated that costs and development could be reduced by up to 85 percent[32] when states reuse business rules when compared to custom development.

While multi-state developments and deployments (Tier 3 reusability) represent a potentially effective approach to minimizing long-term costs for SBE IT systems, our interviews suggest that such arrangements may be difficult to establish by the 2014 start date for SBEs. See Figure 4 for an illustration of the Three Tiers of Reusability.

To help facilitate reuse and accelerate development, CMS has created a web-based, secure Collaborative Application Lifecycle Tool (CALT) through which states can download and upload artifacts and code (Tiers 1 and 2 of reusability) related to their Exchange and their Medicaid/CHIP system modernization efforts. States can also use this tool to organize their projects, direct tasks, and track and report progress throughout the Exchange Life Cycle.[33] It is important to note that everything posted on the CALT website is public domain and that CMS is actively trying to find opportunities for states to "piggy-back" off the efforts of others.[34] Furthermore, CMS has been supporting numerous conferences, webinars, and learning collaboratives on various topics and implementation efforts to promote information sharing between states and the federal government.

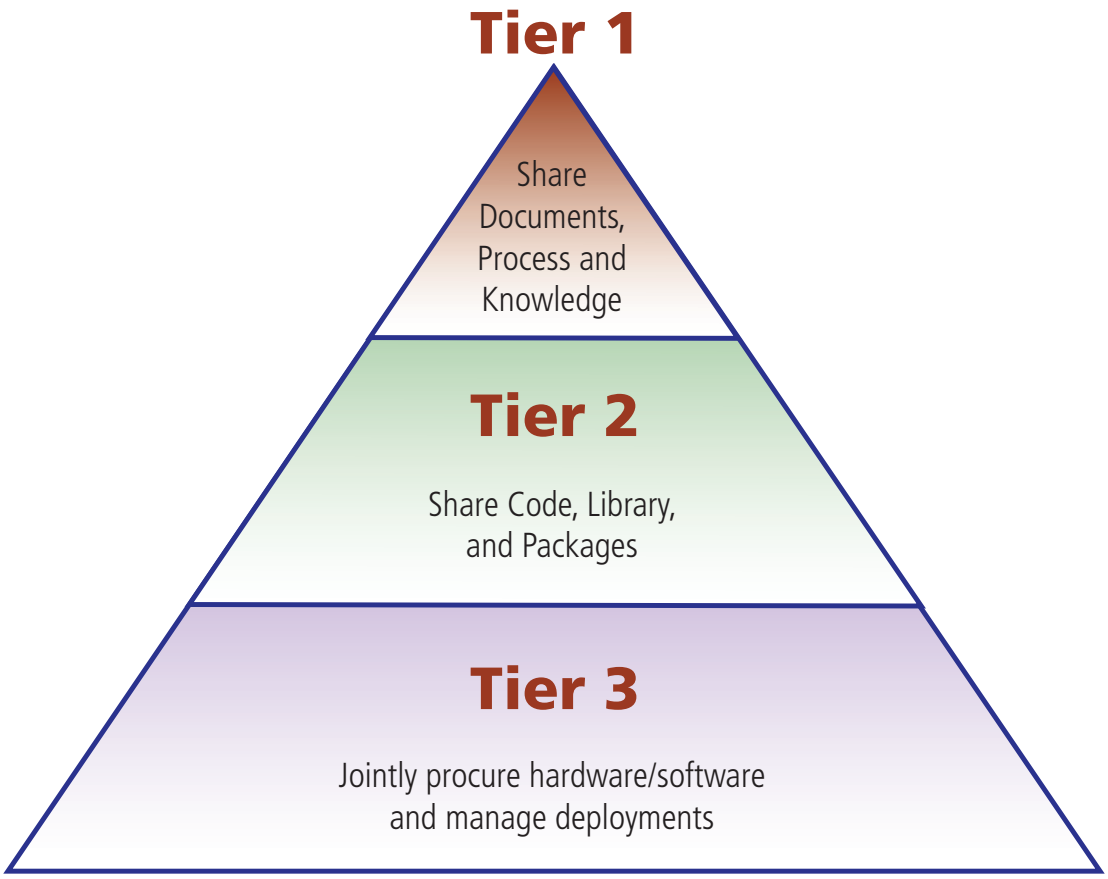
31 U.S. Department of Health & Human Services, "Obama administration and states move forward to implement health care law: Administration makes resources available to help states implement Affordable Insurance Exchanges," (2012).

32 Centers for Medicare & Medicaid Services, "Eligibility and Enrollment System Accelerators," (2012).

33 Centers for Medicare & Medicaid Services, "Collaborative Environment and Life Cycle Governance – Exchange Reference Architecture Supplement," (2011).

34 Centers for Medicare & Medicaid Services, "Eligibility and Enrollment System Accelerators," (2012).

Figure 4



CCIIO clarified their expectations for reuse in a recently published document called "Best Practices and Requirements in Contracting and Procurement for Exchange Information Technology Systems," which focused on reusability expectations and practices that states should adhere to when procuring a vendor. For instance, states that select a vendor to implement any portion of their state exchange should determine if that vendor has already built the same or similar functionality for another state and if so, the state should "join" with that other state and share their requirements with the vendor as a group. These "product strategy councils" are aimed at ensuring that vendors in the space are building COTS functionality that is reusable across as many states as possible and thereby reducing the expensive state by state customizations and maintenance costs of traditional IT builds. Further guidance is provided for states wishing to secure additional funding for planning and developing their Exchanges.[35]

To help facilitate the creation of reusable IT components to be shared on CALT, CMS issued several "Early Innovator" Cooperative Agreements to four states (originally seven) that were early in their establishment of a State-based Exchange. As described previously, these states were awarded federal funds to continue their development efforts with a requirement to share their knowledge, including artifacts, products, and code (within the bounds of their contracts with their IT vendors). This grant funding was supplemental to awarding enhanced matching funds for the Medicaid and CHIP eligibility system modernization that is part of an Exchange's integrated eligibility service.

CMS also recently released a paper called "Multi-State Governance for Medicaid Eligibility and Enrollment Activities." It aims to "harness lessons learned and best practices from existing, successful collaboration governance structures that other states could leverage

35 Centers for Medicare & Medicaid Services, "Best Practices and Requirements in Contracting and Procurement for Exchange Information Technology Systems." (2012).

in their efforts to implement Medicaid Eligibility and Enrollment builds." As with other resources, CMS views multi-state collaborations as a way to accelerate development, lower costs, mitigate risk, and fulfill the reusability requirement of the Seven Conditions and Standards for Enhanced Federal Funding. According to this document, there are several permutations that multi-state collaborations can take, including several states working together to build a complete system, two states joining to create a specific component of a system, and one state hosting others.[36] Collaboratives could also be based on states with a shared vendor, similar IT platforms, or similar goals (e.g., horizontal integration). For example, one type of collaboration could involve two or more states that have already procured the same vendor entering into a partnership for the purposes of sharing a single IT infrastructure, conducing Joint Application Design (JAD) sessions, and designing and testing a system.[37]

Regardless of the arrangement, states participating in a collaborative must agree to establish clear roles, define processes, and limit unnecessary variation in requirements. In order to facilitate collaboration, CMS has made several artifacts available for reuse in a folder titled "accelerators" on the CALT website; these include sample multi-state governance documents, change management process for multi-state IT partnerships, Memoranda of Understandings (MOU), contract language, governance and change management documents, Interagency Agreements (IA), and RFPs. CMS will also provide technical assistance on identifying partners and help states with the structure, logistics, and funding of their partnership.[38]

In addition, all of the deliverables of the FFE should be available for reuse and consumption by the states (e.g., the MAGI business rules, test scenarios, test data, and service notes). Given the tight deadlines of the ACA, all states should consider how they might connect to the FFE for certain Exchange functions. Moreover, to streamline eligibility, the DSH will provide states with access to key functions and connectivity to federal data sources that will verify citizenship, immigration status, and tax information with the Social Security Administration (SSA), the Department of Homeland Security (DHS), and the Internal Revenue Service (IRS).[39]

Other opportunities for collaboration include partnering with one of the "Early Innovator" or other advanced states to leverage IT components or share deployment of essential IT solutions. For example, since all of the "Early Innovator" states are developing rules-based eligibility systems for both MAGI and non-MAGI populations, there is potential for states to leverage this work, including the business rules if states use similar rules engines, and potentially to share in deployment of these systems to lower overall operating costs and support the long-term sustainability of their Exchange. Other technology components that have been identified as having high potential for reuse include the Exchange portal, interfaces with federal systems (e.g., Federal DSH), and core services like identity management, security services, and MDM.

States also have the option of reusing the design products of Enroll UX 2014, a foundation-initiated project to develop a customizable self-service, online enrollment process that provides a consumer-friendly, "first-class" user experience. This effort created detailed design specifications and prototypes for an Exchange designed by a top design firm with input from multiple state and federal staff.[40] In addition, states should also realize that the National Association of Insurance Commissioners (NAIC) is making progress towards leveraging the System for Electronic Rate and Form Filing (SERFF) for plan management functions related to Exchanges.[41] Both these efforts are being leveraged by multiple states to accelerate their Exchange development efforts.

With many states building Exchanges and modernizing their Medicaid/CHIP eligibility systems to meet similar requirements and deadlines — and with the full support of CMS — states should seek opportunities to collaborate at all tiers of reusability with both federal and state partners.

36 Centers for Medicare & Medicaid Services, "Multi-State Governance for Medicaid Eligibility and Enrollment Activities," (2012).

37 Centers for Medicare & Medicaid Services, "Eligibility and Enrollment System Accelerators," (2012).

38 Ibid.

39 Centers for Medicare & Medicaid Services, "Federal Exchange Program System Data Services Hub Statement of Work," (2011).

40 Sam Karp, "Foundations Finance New Design Standard For Health Insurance Exchange Enrollment," Health Affairs (2012).

41 National Association of Insurance Commissioners (NAIC), "Health Insurance Exchange Plan Management (HIX)," (2012).

In order to meet deadlines, Exchange implementation efforts must proceed apace, despite federal and state policy, technology, and political uncertainties.

Creation of an SBE, connection to the FFE, Partnership Exchange, and/or a modernized Medicaid and CHIP eligibility system must be completed while many state and federal policy and technical decisions are still being determined. States most advanced in their Exchange development acknowledge these uncertainties but are still moving ahead, assuring open communication among state entities and the federal government to minimize risk.

States will not only need to rely on their own technology implementations, but must also connect to federal agencies. As described, states will rely heavily on the Federal DSH to obtain access to key functions and connectivity to federal data sources that will verify citizenship, immigration status, and tax information. To reduce uncertainty, a workgroup with members representing both states and the federal government is collaborating on the DSH technical requirements, so states can be better informed on how the Exchanges and Medicaid/CHIP agencies will connect with the federal government. Open communication between the federal government and states has been and will be essential to mitigate the numerous uncertainties.

Despite the gaps between health reform and the intersection of requirements needed to operationalize and build the systems needed to implement these new policies, advanced states are moving ahead with their IT development efforts. This is a stark contrast to the way large scale enterprise software is traditionally built. For example, in other large-scale enterprise software development efforts, the business processes, the rules that govern the transactions, and the transactions themselves are known. In traditional development, these technical details have been fleshed out and operationalized before development. The software development is the effort to add more efficiency to the manual process, add greater user satisfaction, create a higher quality of performance, and ensure integrity. In the current situation, states have to build their systems with requirements that are incomplete because often the new policy has yet to be translated into business processes or the new policy itself has not been shared by the federal government to the state or within the state at a state policy level.

To mitigate some of this risk, the advanced states have been working actively among state entities and the federal government to minimize the risk of uncertainty and unknown requirements. As states create their SBEs, they are leveraging others' efforts and technology where they can. In addition, states are considering phased approaches to their Exchange development, meeting core functionality for the 2014 deadline and expanding more broadly to other functionality and to other health and human service programs in second or third phases. States active in their development are also openly communicating with each other and the federal government to accelerate knowledge sharing and expedite information flows.

There does come a point at which no amount of reuse or resources — whether human or fiscal — will enable the establishment of an SBE or ACA-compliant Medicaid and CHIP eligibility systems for 2014, given the timelines for procurement and development. For those states that committed to an SBE and to systems modernization, moving ahead, even with significant uncertainty, is required to keep apace. Keeping track of open policy and technical decisions and understanding when decisions need to be made is essential to meet IT schedules. Continuous and fast-paced progress is needed to meet the critical milestones for 2014. If not, an incremental approach leveraging the Partnership Exchange or FFE will be needed. While not every policy or technical detail may be clear, continuous and ongoing efforts — even with some uncertainty — are required to meet the deadlines with any option chosen.

CONCLUSION

Creating Exchanges and/or modernized Medicaid and CHIP eligibility systems that are capable of meeting technical challenges and deadlines established by the ACA is a major technology challenge for states and the federal government. While technology development is just one part of establishing an Exchange, it is one of — or perhaps the — most effort-intensive development activities required in order to be ready for the 2014 deadline.

Fortunately, the federal regulators responsible for ACA implementation acknowledge these challenging requirements and timeframes and have created unprecedented resources for Exchange planning, development and operations, as well as support related to required Medicaid/CHIP eligibility and enrollment systems upgrades.

For states committed to creating an SBE for 2014, time is their biggest challenge. Those states that continue to delay implementation until the upcoming November elections will be unlikely to meet 2014 deadlines to become an SBE. Even states that have been actively in development since the law's inception worry about the looming deadlines.

For states re-evaluating the ACA in the wake of the Supreme Court's decision, collaboration with other states that are more advanced in their development efforts and with the federal government is crucial. For instance, states interested in eventually establishing their own Exchange may want to consider entering into a Partnership Exchange with the federal government, where the state can start with consumer assistance and plan management activities. States that do not have Exchanges ready for operation on January 1, 2014, may apply to operate the Exchange in 2015 or in subsequent years. States setting their goal of an SBE for 2015 or beyond must focus their resources and federal funds now on enhancing state specific systems — especially Medicaid and CHIP eligibility determination systems — to comply with the ACA and allow for interoperability with federal systems — namely the FFE and the Federal DSH.

Regardless of whether they use an SBE, Partnership Exchange, or even an FFE approach, states would be well advised to seek out the "Early Innovators" and other advanced states for their lessons learned from procurements and design, to share artifacts and products, and to explore opportunities for collaboration with other states and/or the federal government to accelerate development efforts and control both development and operational costs of their Exchange.

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