The Launch of the Affordable Care Act in Selected States:
Building ACA-Compliant Eligibility and Enrollment Systems

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INTRODUCTION

This brief is part of an eight-brief series (all published in February 2014) in which researchers at the Urban Institute, along with colleagues at Georgetown University's Center on Health Insurance Reforms, assess health reform implementation in eight states that have exhibited varying levels of support for the ACA. This brief—which complements others in the series—focuses on states' development of information technology (IT) systems used by Health Insurance Marketplaces (HIMs) to determine eligibility for and facilitate enrollment in health coverage programs.[1]

For the current analysis, we chose five states that were actively pro-reform—Colorado, Maryland, Minnesota, New York, and Oregon. These states have demonstrated policy leadership and a strong commitment to effective implementation of the ACA. Each has adopted the Medicaid expansion and developed a State-Based Marketplace (SBM). They have engaged with a broad array of stakeholders in designing their state approaches and have pursued significant outreach and enrollment activities in order to increase coverage through their new SBM and through Medicaid. Each has conducted extensive quantitative analyses of the effects of the law on their states and was quick to engage IT vendors. In addition, each has taken responsibility for implementing insurance market reforms and moved beyond federal requirements to improve stability and sustainability of their insurance markets. Not all of these states have had the same experience; for instance (as will be described in

more detail below) Oregon and Maryland had particularly challenging rollouts of their IT systems and were well behind in enrolling applicants during the initial months of the open enrollment period.

We chose Alabama, Michigan, and Virginia as examples of states taking on a more limited role in the implementation of reform. While all three states explored the possibility of developing their own SBMs early on, none had sufficient internal political support to do so, and ultimately defaulted to a Federally-Facilitated Marketplace (FFM). As such, all rely on the federal IT system associated with healthcare.gov for eligibility determination and enrollment. But even as problems with the federal website are resolved, these states face difficulties. None of them participate in consumer outreach and enrollment activities related to their state HIM, and far fewer resources are being devoted to those activities compared with the other five states. The three states' experiences, however, have not been identical. For example, Michigan and Virginia have taken responsibility for plan management, but Alabama left that responsibility to the federal government. Michigan chose to expand Medicaid for 2014; Alabama and Virginia may ultimately do so, but at present, they have not. While some factions in each state support the goals of the ACA, in Alabama, Michigan, and Virginia there has not been a unified commitment to full participation, and the political leadership has chosen to take a more limited role as a result. These states are not likely to fare as well in expanding coverage and achieving

the ACA goals for the foreseeable future.

The first section of this brief (after a summary of key findings) describes how IT systems were developed in the five SBM states, based on telephone interviews conducted with state Marketplace and Medicaid/CHIP officials during the summer and fall of 2013. We also summarize how those systems have performed since their launch on October 1, 2013, based on a review of news articles, Marketplace press releases and enrollment reports, and other publicly available information. The second section of this brief (also based on a review of publicly available information) describes the IT system that is operating in the three FFM study states, with a primary focus on how healthcare.gov has performed since its launch. In the final section of the brief, we examine Marketplace-based enrollment estimates across the study states and conclude with a discussion of factors related to the success or failure of Marketplace IT systems.

SUMMARY OF KEY FINDINGS

Arguably the biggest task facing HIMs has been to create an ACA-compliant IT system that determines an individual's eligibility for and facilitates enrollment in a qualified health plan, income-based federal subsidies, or Medicaid/CHIP. Reaching the ACA's goals for coverage is dependent on a functional IT system, with a key component being a self-service website where consumers can shop, apply for, and enroll in health insurance coverage.

The five states that chose to operate a SBM—Colorado, Maryland, Minnesota, New York, and Oregon—were responsible for developing the IT system to support their Marketplaces. The states all prioritized system development during ACA implementation, and many were recognized as early leaders in this area. In the final months leading up to October 1, officials in these states were generally optimistic about how their Marketplaces would perform and shared common concerns about what might go wrong.

The initial website launch was rocky for each of these five SBMs, as consumers encountered error messages and were unable to create accounts or move forward with the online application process. But states' experiences since that early point have been very different. Some sites have been operating successfully for months; others are still struggling to overcome technical glitches more than midway through the initial open enrollment period. For instance:

- After making a series of upgrades in the first week of open enrollment—including a significant increase in server capacity—New York's Marketplace has been running smoothly and has been recognized as a top performer among all Marketplaces (state-based and federally facilitated).
- Despite some early stumbles, Colorado's

Marketplace system is now functioning well for most users. Initially, many online applicants were experiencing long waits for an eligibility determination from the state's Medicaid/CHIP system, a necessary first step before eligibility for Colorado's Marketplace-based subsidies can be determined. Colorado has made improvements to the process, and a major fix is expected sometime in 2014, when the state integrates the two steps into a single process.

- The problems facing Minnesota's IT system are significant enough that officials are considering (among other options) fundamental changes to its software architecture. Marketplace officials will decide on a repair strategy in early 2014; meanwhile, the state is making improvements to its call center and implementing manual workarounds to the technical glitches that continue to hamper the enrollment process.
- Maryland's website has also been fraught with technical issues since it went live, including frozen screens, lost information, error messages, and mistaken identities. Some lawmakers have suggested that the state abandon the website and begin using the federal healthcare.gov portal, but Governor Martin O'Malley's administration publicly announced that Maryland would "stay the course" and continue repairing its own site through the end of the open enrollment period. Meanwhile, the legislature recently enacted a measure that allows residents who attempted but were unable to access Marketplace coverage to enroll in the state's high-risk insurance pool.
- Oregon's is the only Marketplace website with technical problems serious enough to prevent any online enrollment. After a failed launch, the state implemented a contingency plan and hired hundreds of new workers to process paper applications

manually. While not ideal, it is noteworthy that Oregon's SBM has successfully processed tens of thousands of applications via this manual workaround—more than some other SBMs with functional (albeit glitchy) websites. Though the primary vendor responsible for building Oregon's IT system continues to make repairs, state officials are considering backup options such as replacing software with components designed by other states or the federal government. Just days before this brief was published, Oregon's Marketplace launched a password-protected version of the website that can be accessed by insurance agents and other application assistors.

The three FFM study states—Alabama, Michigan, and Virginia—are relying on the IT system developed by the federal government (primarily known through its online application portal, healthcare.gov) to determine eligibility for qualified health plans and Marketplace-based subsidies. Healthcare.gov stumbled badly in its first weeks of operation. Major issues included difficulty with log-in and account creation, long waits in application verification and eligibility processing, wrong or missing data submitted to health plans regarding individual enrollment, and delays in transferring data to states regarding individuals who may be eligible for Medicaid coverage. As the story unfolded in the days following the website debut, several factors were identified as contributing to the rocky start. Chief among them was that a full, end-to-end testing of the site did not take place until two weeks before its October 1 launch date.

Following the launch, the Obama administration implemented several changes to both the website itself and in the management of the effort. The Obama administration publicly announced a goal to have a completely functioning system that worked for 80 percent of consumers by the end of November 2013, and later indicated that it met these goals after more than 400 technical fixes and a significant upgrade in server capacity. Still, much work remains to make the FFM's IT system truly state-of-the-art as envisioned by the ACA, and—as in many SBMs—officials expect continued improvements and enhancements to the system in the months and years to come.

Marketplace-based enrollment numbers for the first four months of open enrollment (October 1, 2013 through February 1, 2014, as reported by the US Department of Health and Human Services) reflect the early

ACA Requirements for Eligibility and Enrollment Systems

The ACA envisions a streamlined, simplified, and coordinated system that determines eligibility for and enrolls individuals in all health subsidy programs (including Medicaid, CHIP, and Marketplace-based premium and cost-sharing subsidies) and that facilitates seamless transitions across programs. The ACA also calls for the system to allow for self-service enrollment and renewal and to rely on electronic rather than paper-based processes. To meet these goals, the ACA requires HIMs to:

- Create a "no wrong door" system that includes a website and screens people seeking coverage for all health subsidy programs and enrolls them in the correct program.
- Use a single, streamlined enrollment application that allows individuals to apply for all health subsidy programs and that can be submitted online, by mail or telephone, or in person.
- To the maximum extent possible, develop and use secure electronic interfaces to share available data to establish, verify, and update eligibility for all health subsidy programs.

successes and stumbles of the web-based eligibility and enrollment systems operating in the study states. Enrollment figures for the five SBM study states range from 211,290 individuals enrolled in private plans in New York to 28,611 individuals enrolled in a private plan in Minnesota. During the first four months of open enrollment, more than 1.9 million individuals enrolled in a private plan through the FFM; this includes 43,863 in Alabama, 112,013 in Michigan, and 74,199 in Virginia. The Marketplaces have also determined (or assessed) eligibility for Medicaid or CHIP for millions of individuals during the first four months of open enrollment, ranging from 16,270 individuals in Alabama to 178,145 individuals in New York.

For all the study states and across the Marketplaces more generally, the pace of enrollment has increased as the open enrollment period has progressed and as technical issues have been addressed. Enrollment surged in December 2013 as the deadline for coverage beginning January 1, 2014, approached; in that month alone, enrollment increased more than threefold among the SBMs and more than sevenfold across FFM states. This swell in enrollment has continued into the first months of 2014, with federal officials reporting that total Marketplace enrollment had hit the 4 million mark on February 25, 2014. Federal and state officials have also predicted a significant uptick in enrollment in March 2014, as the deadline for open enrollment approaches.

IT SYSTEM DEVELOPMENT IN THE STATE-BASED MARKETPLACES OF COLORADO, MARYLAND, MINNESOTA, NEW YORK, AND OREGON

Building an ACA-compliant IT system has been a top priority for the SBM states. IT development started soon after the ACA was passed and continued at a rapid pace over the next several years, as Marketplace officials scrambled to get the complex systems in place by October 2013, the beginning of open enrollment for the 2014 plan year. Each of the five SBM study states opted to build a single, shared eligibility and enrollment system that could determine eligibility for the Marketplace (including subsidies), Medicaid, and CHIP in one step. (Colorado is unique in that the state decided to initially configure its Marketplace and Medicaid/CHIP systems to be separate but interoperable [i.e., able to exchange and make use of one another's information] though the state plans to integrate the two by 2015.)

A fully integrated approach was deemed most efficient in the long run, because the coverage programs have many shared eligibility and enrollment functions, including the use of a new ACA-required income standard, referred to as the modified adjusted gross income, or MAGI, standard. To meet deadlines for launching their systems by October 2013, the SBM states elected to build systems that would, at least in the near term, determine eligibility only for health programs that use the new MAGI standard.[2] Eventually, each of the states plan to integrate eligibility and enrollment functions for Medicaid populations currently exempt from MAGI (including the aged, blind, and disabled) and for human service programs, incorporating these other programs under a multiphase approach in the near future.

Marketplace and Medicaid officials hired vendors to assist with system development, a decision considered necessary both because of time constraints and lack of specific in-house expertise. Each of the five SBMs contracted with between four (in Oregon) and eight (in Colorado) system, software, and platform vendors that were responsible for one or more system tasks or components (e.g., development, financial or plan management, system integration).[3] All five states used off-the-shelf system components that vendors configured specifically for them. This was in lieu of creating a custom-built system that would require more resources and may have forced states to rely on the vendor, in perpetuity, for future coding and programming needs.

In the months leading up to the open enrollment period, Marketplace and Medicaid officials in each study state expressed cautious optimism that their systems would be ready to accept and process online applications on October 1, though all expected to encounter some challenges and growing pains as the systems were rolled out. Many described plans for a series of improvements after the initial launch, as they built out new functions that could not be incorporated before October 1, because of time constraints. These officials also warned of the need to manage the public's expectations for how the systems would work on day one, given the phased approach for rolling out different features of their eligibility and enrollment systems over time. Another oft-repeated concern related to uncertainty about the volume of website visitors and the number of applications that might be submitted in the days following the launch, a big unknown that made it difficult for Marketplace and Medicaid officials to feel completely prepared for open enrollment.

A chief concern among the five SBMs in the pre-launch period related to the federal Data Services Hub. Created by the ACA, the Hub is meant to connect Marketplaces and Medicaid/CHIP programs to common federal data sources (including the Social Services Administration, the Department of Homeland Security, and the Internal Revenue Service) to facilitate the electronic verification of applicant-supplied information on income, immigration status, citizenship, and access to other coverage.[4] In addition to eligibility verification functions, the Hub includes a service that determines the amount, if any, of an applicant's subsidy.

The Hub is key to achieving the real-time eligibility determination envisioned by the ACA, but some

Marketplace and Medicaid officials in the study states worried that the connections between their new systems and the Hub would not work well, given the compressed time frame for testing those connections, which occurred primarily during the summer of 2013. Directly preceding the October 2013 launch, some expressed frustration that the parameters of the Hub continued to change even after their state Marketplace systems were effectively operational, requiring further changes on the state's end, with very little time to complete them.

SYSTEM PERFORMANCE IN STATE-BASED MARKETPLACES SINCE OCTOBER 1, 2013 (OPEN ENROLLMENT PERIOD)

As it turns out, state officials' concerns and warnings were well-founded. Immediately after their October 1 launch, Marketplace websites across the five states were plagued with technical glitches: consumers encountered error messages and were unable to create accounts or move forward with the online application process.[5] High website traffic contributed to these early technical problems, at least in some of the states. Reports from Colorado indicated that its website was "temporarily overwhelmed" by tens of thousands of simultaneous visitors;[6] public officials in Maryland also pointed to unexpectedly heavy site traffic as an initial problem.[7] In response, some states increased server capacity soon after open enrollment began. New York, for instance, quadrupled its server capacity and made a series of software upgrades within 10 days of its Marketplace launch.[8]

Though their Marketplaces all stumbled initially, the study states' experiences since those first weeks of operation have been very different. When New York made the above-mentioned improvements in early October 2013, website problems were largely resolved; its Marketplace has been running relatively smoothly ever since, and has been recognized as a top performer among all Marketplaces (state-based and federally facilitated).[9] Like most states, New York's Marketplace experienced a surge in applications in December 2013 that contributed to some minor delays in processing time; New York plans to add more than 300 trained representatives to its Marketplace call center in preparation for the March 31, 2014 end of open enrollment.[10]

In Colorado, some online applicants in the first few months of open enrollment experienced long waits for an eligibility determination from the state's Medicaid/CHIP system, a necessary first step before determining eligibility for Marketplace-based subsidies (because,

as noted above, the state is still relying on two systems while completing development of a single integrated system for all coverage programs). Since launching its site, Colorado has made several upgrades to improve the user experience. By the end of December 2013, officials reported that application backlogs had been cleared and that Medicaid/CHIP eligibility determinations were immediate for as many as 80 percent of applicants.[11] Others may wait a matter of days for a determination. Delays should be resolved when Colorado moves to a single integrated IT system for all health coverage programs, which is expected sometime 2014. The online Marketplaces in Minnesota and Maryland have experienced more extensive problems since the start of open enrollment. Though the websites of both states are operational (and tens of thousands of online applicants have successfully completed enrollment), technical glitches have persisted, more than midway through the open enrollment period. Officials in both Maryland and Minnesota have indicated that software common to both systems (from the vendor, Curam, now part of IBM) is at least partly responsible for poor website performance.[12]

Minnesota's system troubles include malfunctions in the security verification and online account creation process, as well as problems with plan selection. The difficulties facing Minnesota's IT system are significant enough that officials are considering (among other options) fundamental changes to its software architecture. A recent consultant's report identified more than 200 software defects in the system and suggested two possible remediation strategies or a third, more drastic option of replacing software components to implement a new solution that would be launched by 2016.[13] Minnesota Marketplace officials will decide on a repair strategy in early 2014; meanwhile, the state is making improvements to its call center and implementing manual workarounds to the technical glitches that continue to hamper the enrollment process.[14] In early February 2014,

officials reported that 98 percent of website users are now able to complete their transaction without help, compared to 70 percent at the end of 2013.[15]

After Maryland's challenging Marketplace launch, state officials reported that components of its website would be taken down each night in October to make improvements.[16] One feature of the site that may have contributed to initial problems is the requirement that visitors create an account before browsing available health plans. This design approach (the same one taken by the federal healthcare.gov Marketplace portal, as described below) is not typical of e-commerce sites, and has been criticized by IT experts because it creates bottlenecks by requiring all visitors (even those who do not intend to complete a purchase) to provide personal details up front. Maryland's Marketplace has since launched a new browsing feature called "Prepare for Enrollment" that includes downloadable information about plan offerings and financial assistance.

After months of repairs, Maryland leaders claimed in January 2014 that the website—while still glitchy—was working smoothly for a majority of users.[17] Though the pace of enrollment has picked up in recent months, it is still far below the state's projections. Some lawmakers have suggested that the state abandon the website and begin using the federal healthcare.gov portal, but Governor Martin O'Malley's administration publicly announced that Maryland would "stay the course" and continue repairs to its own site through the end of the open enrollment period.[18] After that, the state's options for implementing a long-term solution include rebuilding large segments of its system or replacing parts of it with superior technology from other SBMs, partnering with the FFM, or joining a state consortium.[19] Meanwhile, the legislature recently enacted a measure that allows residents who attempted but were unable to access Marketplace coverage to enroll in the state's high-risk insurance pool.[20]

In Colorado, Maryland, and Minnesota, there have also been reports of delays in the electronic transfer of enrollment data from the Marketplace to consumers' chosen health insurance carriers, a process known in the industry as an 834 transmission. When an individual signs up for a health plan through the Marketplace, the system is supposed to generate an 834 form and submit it to the carrier, which then processes the form and places individuals in their selected health plan. Although not a problem directly affecting consumers during the eligibility and enrollment process, timely transfer of new enrollee

data is essential for carriers to begin coverage by the plan year's start date, particularly if the carrier must bill for (and the enrollee must pay) premium charges before coverage starts. Carriers in Colorado and Maryland began receiving enrollment files in November 2013, and Minnesota's 834 transmissions began in December 2013.[21] The Marketplaces in both Minnesota and Maryland have had to resolve glitches—such as erroneous or incomplete address information—discovered in the electronic transmission process, including through manual corrections.[22]

Among the five SBM study states (and SBMs overall), Oregon's is the only Marketplace website with technical problems serious enough to prevent online, automated enrollment. Initially, Marketplace officials responded to technical glitches by limiting online application access to certified enrollment assisters.[23] When the site continued to experience high error rates in its eligibility determinations, the web-based application was taken offline entirely.[24] Though far from ideal, Oregon moved quickly to implement a contingency plan for carrying out eligibility and enrollment activities while the website is under repair. Application and enrollment is currently a three-step process: (1) an individual submits a paper or PDF application that is manually entered into the system by an eligibility worker; (2) the individual is notified about his or her eligibility by mail, e-mail, or phone; and (3) eligible individuals select a plan through the website. Hundreds of new workers have been hired (or reassigned) to process paper applications manually under this temporary approach.[25] Oregon has also begun holding enrollment fairs, where residents can learn about and sign up for Marketplace coverage in person.[26] It is noteworthy that Oregon's SBM has successfully processed tens of thousands of applications via its manual contingency plan—more than some other SBMs with functional (albeit glitchy) websites.

Though the primary vendor responsible for building Oregon's IT system continues to work on repairs, some question whether it will ever be functional, and state officials are considering backup options if the site is not working by the end of March. These options include replacing software with components designed by other states or the federal government.[27] State lawmakers have also proposed a number of legislative measures that would help more residents obtain coverage (e.g., directing Oregon's Marketplace to extend the open enrollment deadline by a month) and increase oversight of Marketplace operations.[28] Most recently (and just before

this brief was published) Oregon's Marketplace launched a password-protected version of the website that can be accessed by insurance agents and other application assistors. Officials have not provided a date for when the web portal will be open to the public but have indicated they hope to have this done by the end of March 2014.[29]

Finally, it is notable that the executive directors of the Oregon Marketplace and two other SBMs in our study—Maryland and Minnesota—have recently left their positions amid criticism of their states' poorly performing websites.[30]

IT SYSTEM DEVELOPMENT FOR THE FEDERALLY FACILITATED MARKETPLACE OF ALABAMA, MICHIGAN, AND VIRGINIA

Per the ACA, the US Department of Health and Human Services (DHHS) was charged with overseeing the development of the eligibility and enrollment system for FFM states—Alabama, Michigan, Virginia, and 33 others—including its primary access point, the healthcare.gov website. The site was built at an estimated cost of $630 million,[31] with support from approximately 50 contractors.

Figure 1 demonstrates healthcare.gov's multistep eligibility and enrollment process. An individual must initially register with the website by opening an account. The next step involves completing an application by providing personal information like date of birth, Social Security number, and income; this information is then verified electronically using the federal Data Services Hub, and insurance eligibility status is determined.
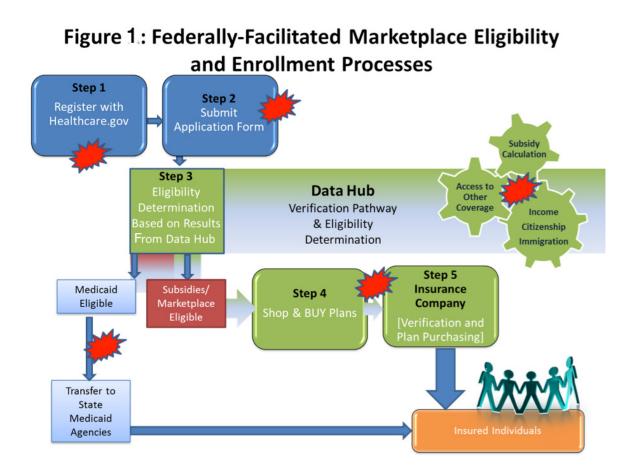
If individuals are eligible for Marketplace coverage, healthcare.gov offers them the opportunity to shop for health plans available in their local area. If the applicant has been determined eligible for a federal subsidy, their plan offerings will reflect this (with prices shown after the subsidy is applied). Once a plan is selected, the Marketplace must transmit an 834 form to the chosen carrier, including information from the newly enrolled individual's application.

Although states relying on healthcare.gov are not responsible for operating their own Marketplaces, the ACA required all states—regardless of SBM or FFM status—to undertake several Medicaid and CHIP eligibility changes to comply with the law's stipulations for a streamlined and coordinated eligibility process for all health insurance affordability programs: Medicaid, CHIP, and federal subsidies to purchase insurance through a qualified health plan.[32] At a minimum, state

Medicaid (and CHIP, if separate) agencies in the 36 states with FFMs must coordinate with healthcare.gov, a condition that required these states to design and build new interfaces so that previously separate systems could communicate with one another and with the new systems built for ACA. Among other things, states now need to have in place systems that can:

- Receive electronic accounts for individuals that healthcare.gov has screened as being potentially (or determined) eligible for Medicaid and make a final determination (or promptly enroll in program); and
- Transfer electronic accounts for individuals determined ineligible for Medicaid by the state Medicaid agency but who are potentially eligible for Marketplace coverage to healthcare.gov.

States had a choice in whether the FFM would assess or determine eligibility for Medicaid and CHIP. Both Michigan and Virginia (and the majority of the 36 states relying on healthcare.gov) elected to have the federal Marketplace only assess applicants for Medicaid eligibility based on new eligibility rules, then transfer the applicant's electronic account to the state Medicaid agency to complete the eligibility determination. Alabama, by contrast, chose to have healthcare.gov determine Medicaid eligibility under the new rules and accept that determination as final.[33]

Beyond the ability to electronically transmit information with healthcare.gov, the ACA required state Medicaid agencies to put in place a number of eligibility changes, including a single streamlined application for all health insurance affordability programs and use of the new MAGI standard. For all Medicaid populations (those newly eligible under the ACA as well as those eligible under old program rules), state agencies

Figure 1.: Federally-Facilitated Marketplace Eligibility and Enrollment Processes

are expected to verify as much eligibility information (income, household size, residency, etc.) as possible using electronic sources, moving from paper-based documentation to a much more automated process. To do this, state Medicaid agencies are expected to be able connect to the federal Data Services Hub to verify applicant information.

To implement these and other requirements, virtually all FFM states executed contracts with IT vendors to either rebuild or modernize their Medicaid eligibility systems so that they are ACA-compliant.[34] Virginia, for example, hired Deloitte in December 2012 to build a new Medicaid eligibility determination system called Virginia Case Management System that is to also interface with healthcare.gov. Virginia state officials acknowledged that even as late as September 2013, they had not been able to thoroughly test their new system with healthcare.gov. Apparently, this was not unique to Virginia. As an official from the National Association of Medicaid Directors was quoted in a Politico.com article: "We're flying blind on what the process is. There hasn't been the capacity to do a lot of the testing. There is concern that what has been tested may not be able to handle the volume."[35]

SYSTEM PERFORMANCE IN FEDERALLY FACILITATED MARKETPLACES SINCE OCTOBER 1, 2013 (OPEN ENROLLMENT PERIOD)

As has been well-documented by the popular press, when the healthcare.gov website went live on October 1, it was immediately fraught with technical problems.[36] In the first days after the launch, major issues (highlighted as red spots in Figure 1) included difficulty with log-in and account creation, long waits in application verification and eligibility processing, wrong or missing data submitted to health plans on individuals who

signed up, and delays in transferring data to states on individuals who may be eligible for Medicaid coverage.

As the story unfolded in the days following the debut of healthcare.gov, several factors were identified as contributing to the website's rocky start. Chief among them was that a full, end-to-end testing of the site did not take place until two weeks before its October 1 launch date.[37] Indeed, less than a month and half before launch, one of the governtment's major contractors reported only 55 percent of its work on the site had been completed.[38] As with Maryland's SBM, healthcare.gov's requirement that users create an account before shopping for a health plan was also blamed for overloading the website in its first days of operation.

Overlaying these more technical issues was the fact that 47 federal contractors were involved with the federal government in designing and developing the website, but none were designated as the lead or managing contractor.[39] In addition, the office within DHHS tasked with spearheading the federal government's effort to develop the site had three directors in as many years. Balancing the technical demands of the website against the political pressure to launch the site within what is generally acknowledged as a compressed timeline was another apparent factor. The Obama administration was understandably pushing to meet deadlines and policy needs, but the technical experts involved—who better understood the critical design path of the system—had concerns.

Since the launch, the Obama administration has implemented several changes to both the website itself and in the management of the effort. As to the former, DHHS rolled out a feature that allows consumers to look at health plans in their local area without first establishing an account, and made a series of other "back-end" improvements to correct glitches and error messages. As to management, President Obama designated a temporary website "czar" as the point person for site repairs in the immediate aftermath of the launch; in December 2013, a former top Microsoft executive was picked as a permanent replacement.[40] In addition, a single contractor was designated to manage the overall repair effort across contractors. And a so-called "tech surge" was implemented in which IT experts were added to the healthcare.gov fix-it team, individuals from both inside the government and from private firms.

The Obama administration publicly announced a goal

to have a completely functioning system that worked for 80 percent of consumers by the end of November 2013. Specific objectives included expanding the website's capacity to withstand as many as 50,000 users at one time and up to 800,000 visitors daily and reducing error rates so they are consistently "well below 1 percent." In a progress and performance report released on December 1, 2013, DHHS indicated that it had met these goals after making more than 400 technical fixes and a significant upgrade in server capacity."[41]

A significant amount of IT development work remains, however. Two persistent trouble spots involve the transfer of applicant information from healthcare.gov to insurance carriers and state Medicaid agencies. The first involves the aforementioned 834 transmission process; problems include both missing 834 forms (i.e., the data are not transmitted at all) and errors in the forms that are transmitted. The federal government recently indicated that repairs to the transmission process significantly reduced the 834 error rate. Throughout October and November 2013 there were errors in an estimated quarter of the 834 enrollment files transferred from healthcare.gov to insurance carriers; by December, this had dropped to 10 percent.[42] Insurers, however, have suggested that the government is overstating the improvements and that they continue to receive many erroneous files from the federal IT system.[43]

The second problem centers around transferring information to state Medicaid agencies for applicants whom the federal website has assessed (or determined) eligible for Medicaid or CHIP. Healthcare.gov was designed to have a real-time electronic account transfer function to state Medicaid/CHIP agencies at the time of launch, but this feature was delayed by several months. In December 2013, the federal government was in the final stages of launching the electronic account transfer process, beginning with a subset of states that had successfully completed testing and demonstrated readiness to receive the files.

While waiting for the electronic account transfer feature to go live, Medicaid agencies have been receiving weekly "flat files," or files containing at least partial information on individuals who applied to healthcare.gov and were assessed as Medicaid/CHIP eligible. State Medicaid agencies were meant to use the flat file data to help prepare for the (potentially large) volume of applications that would be transferred electronically, but the flat files themselves have been problematic. Some states

reported, for instance, that their sampling of the flat file data identified individuals already enrolled in the state Medicaid program.[44] In a more recent development, the federal Centers for Medicare & Medicaid Services (CMS) announced at the end of November 2013 that—in the interest of timely enrollment—it will permit states to use the flat files to enroll individuals, and will not penalize states that accidentally enroll a non-eligible individual based on information in these flat files.[45] The flat files will reportedly be improved to include sufficient information for enrollment purposes—according to a mid-December update of the National Association of State Medicaid Directors, some states are pursuing a waiver to use the flat files for enrollment.[46]

Finally, federal officials have also reported that certain aspects of the system not directly related to the application process—such as the mechanism for transferring federal subsidy dollars to the health plans selected by subsidy-eligible Marketplace enrollees—have not been completely built.[47] Although these functions were always expected to go live after the October 1 launch, their development has been further delayed as DHHS and its contractors focus on improving the application process. The administration recently ended its contract with the vendor mainly responsible for building (and subsequently repairing) healthcare.gov, and hired a new vendor to handle many of the website's key back-end processes, such as the subsidy transfer and accounting process and making risk-adjusted payments to insurance carriers. The new vendor is also responsible for improving the call center, direct enrollment option with carriers, and the accuracy of 834 forms.[48]

ENROLLMENT IN STATE-BASED AND FEDERALLY FACILITATED MARKETPLACES

As shown in Table 1, Marketplace-based enrollment numbers for the first first four months of open enrollment (October 1, 2013 through February 1, 2014) reflect the early successes and stumbles of the web-based eligibility and enrollment systems at work in the study states. (Note that private plan enrollment totals include individuals who selected a plan, with or without the first premium payment having been received directly by the Marketplace or the insurance carrier.)

To assess the success of Marketplace systems in determining eligibility for and enrolling applicants in health plans, Table 1 shows actual private plan enrollment as a percentage of Urban Institute (UI) projections for private plan enrollment through December 2014. To allow for cross-state comparisons of early enrollment success, UI projections (based on the Health Insurance Policy Simulation Model or HIPSM[49]) are used rather than estimates developed in September 2013 by DHHS (the latter can reflect different methodologies used by different states).[50] When assessed against UI projections, the relative success of New York and Colorado's Marketplaces is evident: these two states have already enrolled, respectively, 67 and 51 percent of December 2014 projected enrollment, at the start of February 2014. On the other hand, the Maryland and Oregon SBMs have each

enrolled approximately one third of projected enrollees. Minnesota's SBM has performed similarly (at 32 percent of projected enrollment). Unlike in other study states, however, low-income SBM applicants in Minnesota are not enrolled in private plans but are instead enrolled in the public MinnesotaCare program. Compared to other study states, therefore, Minnesota's private plan enrollment total is artificially low by an amount that is difficult to calculate.

Nationally, during the first four months more than 1.9 million individuals enrolled in a private plan through the FFM including 43,863 in Alabama, 112,013 in Michigan, and 74,199 in Virginia. Michigan enrollment represents more than fifty percent of UI projections, and enrollment in Alabama and Virginia is lagging in comparison. Even so, relative to projections, the FFM has been more successful in enrolling individuals in private plans than some of the SBM states. As a whole, however, Table 1 shows that the 15 SBMs have experienced more success (in terms of meeting projections) than the FFM.

The Marketplaces have also determined (or assessed) eligibility for Medicaid or CHIP for millions of individuals during the first four months of open enrollment ranging from 16,270 individuals in Alabama to 178,145 individuals in New York. All totaled, more than 3 million individuals have been determined eligible for Medicaid through the

Table 1: Health Insurance Marketplace-Based Eligibility and Enrollment and Urban Institute Enrollment Projections in Selected States During the First Four Months of the Open Enrollment Period[1]

State/ Marketplace	Number of Individuals Determined Eligible and/or Enrolled Through Marketplaces			Urban Institute Projections for Private Plan Enrollment Through CY2014	
	Medicaid/CHIP (Determined or Assessed Eligible)[2]	Marketplace (Private) Plan		Projected Enrollment (Number of Individuals)	Enrolled in Private Plan as a Percentage of Projection
		Determined Eligible	Enrolled in a Plan[3]		
Colorado	n/a	123,820	68,454	133,361	51%
Maryland	81,040	38,375	29,059	94,133	31%
Minnesota[4]	61,784	94,789	28,611	88,785	32%
New York	178,145	476,385	211,290	313,232	67%
Oregon	76,578	59,242	33,808	91,991	37%
All State-Based Marketplaces (14 states + DC[5])	2,013,145	2,488,288	1,359,904	2,160,381	63%
Alabama	16,270	111,951	43,863	108,642	40%
Michigan	34,032	255,055	112,013	201,642	56%
Virginia	27,860	200,865	74,199	188,553	39%
Federally Facilitated Marketplace (36 states[5])	1,168,010	4,778,942	1,939,588	4,936,254	39%

Sources: DHHS Office of the Assistant Secretary for Planning and Evaluation, Health Insurance Marketplace: February Enrollment Report, 2/12/14, http://aspe.hhs.gov/health/reports/2014/MarketPlaceEnrollment/Feb2014/ib_2014feb_enrollment.pdf; Urban Institute projections using the Health Insurance Policy Simulation Model (HIPSM), February 2014. See endnotes 49 and 50 for additional information about HIPSM and methodology for the Urban Institute's projections.
Notes:
(1) Data are for period between 10/1/13 and 2/1/14.
(2) States have the option of having Marketplaces either (a) assess Medicaid/CHIP eligibility before transferring applicant information to the state Medicaid/CHIP for a final determination, or (b) conduct a final determination for Medicaid/CHIP. Colorado's Marketplace does not currently have an integrated eligibility system, and data for individuals determined or assessed eligible for Medicaid/CHIP is not available.
(3) Private plan enrollment totals include individuals that have selected a plan, with or without the first premium payment having been received directly by the Marketplace or the insurance carrier. This is sometimes called pre-effectuated enrollment.
(4) Minnesota's cumulative data for individuals who have been determined eligible for or enrolled in a private Marketplace plan do not include adults with incomes between 133 percent and 200 percent of the FPL, because those individuals are enrolled in the MinnesotaCare program. Between 10/1/13 and 1/4/14, the Minnesota Marketplace determined that 17,570 individuals were eligible for MinnesotaCare. (See: MNsure, the MNsure Metrics October 1, 2013 through January 4, 2014, https://www.mnsure.org/images/Bd-2013-01-08-MNsureMetrics.pdf.)
(5) Idaho and New Mexico have established a State-Based Marketplace but are using the FFM eligibility and enrollment system (accessed through healthcare.gov) for 2014; accordingly, enrollment in these two states has been included in the FFM total.

Marketplaces (state-based and federal) since October 1, a sometimes overlooked success of these systems.

Enrollment in Medicaid/CHIP is also occurring outside the Marketplaces, directly through Medicaid and CHIP agencies. For example, Virginia's Medicaid/CHIP agency received more than 30,000 applications for coverage from October through December 2013, which represents a 13.5 percent increase when compared to the number of Medicaid/CHIP applications the agency received pre-October 2013 (or before the open enrollment period).[51] Though also occurring outside the Marketplace (and therefore excluded from Table 1), an automatic enrollment initiative undertaken by Oregon has been successful in enrolling a large number of individuals eligible for the Medicaid expansion; specifically, the initiative targets

adults enrolled in the Supplemental Nutrition Assistance Program (SNAP, also known as food stamps) and had enrolled more than 62,000 individuals by the end of October 2013.[52]

For all the study states and across the Marketplaces more generally, the pace of enrollment has increased as the open enrollment period has progressed and as technical issues have been addressed. Enrollment surged in December 2013 as the deadline for coverage beginning January 1, 2014 approached; in that month alone, enrollment increased more than threefold among the SBMs and more than sevenfold across FFM states. Significant growth has continued into 2014, with federal officials reporting a 53 percent increase in plan selection in January.[53] And on February 25, 2014, CMS reported

that the Marketplaces had reached a key milestone, with 4 million individuals enrolled across the SBMs and the FFM. Federal and state officials have also predicted a significant uptick in enrollment in March 2014, as the close of open enrollment approaches, including among individuals determined eligible for a private plan but who have yet to enroll in one. A comparison of the third and fourth columns in Table 1 shows that across the study states, a large number of individuals have been determined eligible but have not selected a plan to complete the enrollment process.

DISCUSSION

The troubles of healthcare.gov have been examined in depth since the website was launched (including through a series of congressional hearings) and a number of contributing factors have become evident, including the complexity of the project paired with an aggressive time frame (and political pressures), a large number of contractors but no single coordinating and lead entity, and poor design choices, among others.

It is less clear why the IT systems of some SBMs have been so successful while others have hit major snags, though more information is becoming available as journalists and others probe for details about what went wrong in those states that have experienced problems. The five SBM study states all prioritized IT development during ACA implementation, and many were recognized as early leaders in this area.[54] In the weeks leading up to October 1, officials in each state were optimistic about how their Marketplaces would perform and shared similar concerns about what might go wrong. But since open enrollment began, it has become apparent that Marketplace systems in some states did not function as designed (e.g., Oregon) whereas others were functional but impeded by design and software defects (e.g., Maryland and Minnesota) that will take time to correct.

Many of the technical and design problems plaguing the five SBM states mirrored those of the FFM website healthcare.gov—for example, inability to browse anonymously, error messages and inadequate server capacity, delays in transfer of enrollment data to health plans—though several SBMs including those in New York and Colorado have (to date) run more smoothly and been more successful in enrolling applicants online. Designing and implementing the IT system for the FFM was a much larger task, scale-wise, than the one facing the SBMs; though this indicates an even greater need for coordination and readiness-testing, the FFM was lacking in both when compared with several of the SBMs. In addition, the federal government does not, unfortunately, have a strong track record with its IT efforts. In recent years, multiple federal agencies (the Federal Bureau of Investigation, Internal Revenue Service, Department of Defense, and many others) have been involved with bungled IT modernization projects. At least some of the blame may lie in the federal procurement process. For instance, the requirements and paperwork necessary for obtaining a federal government contract may be major deterrents for small, innovative IT design firms.[55] This was less of a problem for the SBMs, as many created a quasi-governmental body to establish and operate the Marketplace, in part to allow for easier contracting and more rapid decision-making without being encumbered by the state government procurement process.

In light of the past months' IT problems and their hampering effect on enrollment, concerns about Marketplace financing and sustainability have been raised in several of the SBM study states—particularly in Oregon, but also in Colorado, Maryland, and Minnesota. For instance, Oregon's Marketplace is now projecting higher costs (including increased spending on IT), lower revenue (because revenue is based on per-enrollee fee, and enrollment projections have been dialed back), and a smaller reserve fund—this has caused some stakeholders to question whether and how the Marketplace will achieve self-sustaining status when federal grant funds expire at the end of 2014.[56] It has also raised questions of how the ongoing website repairs will be funded and, accordingly, whether SBMs with still-struggling sites might be better off moving to the healthcare.gov platform.

In conclusion, although their experiences during the first months of open enrollment have varied considerably, the SBM states' continued commitment to establishing an ACA-compliant eligibility and enrollment system did not waiver. As of this writing in February 2014, each of the SBMs have moved quickly to address technical problems as they arose, put contingency plans in place while systems were repaired, and direct additional resources to make system improvements as open enrollment progressed. The FFM, too, has improved considerably since its first few days of operation, but—as is readily acknowledged by the Obama administration—much work remains to make its IT system truly state-of-the-art as envisioned by the ACA.

ENDNOTES

1. The ACA stipulates that applicants must be able to apply for Marketplace and Medicaid/CHIP coverage through a number of different pathways—online, by mail, telephone, or in person—all of which comprise a state's eligibility and enrollment system, more broadly. In this brief, we focus primarily on efforts to develop a self-service, web-based pathway for enrollment, as well as the IT systems that underlie the eligibility determination process for all pathways. In addition, our examination of IT systems for the Marketplaces is limited to systems for individual enrollment; we do not explore eligibility and enrollment for small businesses via the SHOP (Small Business Health Options Program) Marketplace.

2. States must use the new MAGI standard to determine eligibility for Marketplace subsidies, CHIP, and nonelderly, nondisabled Medicaid beneficiaries. Other Medicaid populations (including the aged, blind, and disabled) are exempt from the standard. To comply with the ACA's "no wrong door" policy, the new systems must have an "off ramp" so that Marketplace applicants who appear to be Medicaid eligible, but who are exempt from the new standard, can be seamlessly directed to the state's legacy Medicaid system for a determination under old Medicaid rules.

3. Because Colorado Medicaid will conduct its own eligibility determinations (using the new income standard) separately from the Marketplace, at least in the near term, the state's Medicaid agency also contracted with vendors to make the upgrades necessary to carry out these determinations and interact with the Marketplace. See: Keays, Scott. "Exchange and Medicaid IT System Contracts." Chart posted on National Academy for State Health Policy's State Refor(u)m website https://www.statereforum.org/medicaid-exchange-it-contracts

4. The five SBM states planned to use the Hub to the maximum extent possible, but also built their systems to connect to other verification sources. Some will use state databases as secondary verification in case Hub results do not match information provided by the applicant. In Maryland, for instance, the Marketplace will tap into quarterly wage data from the state's labor department if an applicant's self-attested income is not reasonably compatible with federal IRS data from the Hub.

5. See, for instance: Olson, Jeremy, and Jackie Crosby. "MNsure Health Insurance Exchange Busy, but Still Bumpy." *Star Tribune*. October 3, 2013. http://www.startribune.com/lifestyle/health/226168571.html; and Precious, Tom. "New York Health Exchange Website Experiences Rough Start." *Buffalo News*. October 1, 2013. http://www.buffalonews.com/city-region/state/new-york-health-exchange-website-experiences-rough-start-20131001

6. Wyatt, Kristen. "Colorado Health Exchange Site Briefly Overwhelmed On 1st Day." Associated Press. October 1, 2013. http://denver.cbslocal.com/2013/10/01/colorado-health-exchange-site-briefly-overwhelmed-on-1st-day/

7. Sun, Lena H. "Maryland's Health Insurance Website Stumbles Badly in First Days." *Washington Post*. October 4, 2013. http://www.washingtonpost.com/national/health-science/marylands-health-insurance-web-site-stumbles-badly-in-first-days/2013/10/04/3ab54c70-2d0f-11e3-b139-029811dbb57f_story.html

8. Associated Press."NY Reports 40,000 Enroll for Health Insurance." *Wall Street Journal*. October 9, 2013. http://online.wsj.com/article/AP7a229a8b8fda4a27b5d9ddb2a8e4f118.html

9. Cunningham, Paige Winfield. "State Health Exchanges Are Showing Mixed Results." *Politico*. November 5, 2013. http://www.politico.com/story/2013/11/state-health-care-exchanges-mixed-results-obamacare-affordable-care-act-99346.html#ixzz2jsdlHrU

10. Carns, Ann. "Navigating a New Health Plan, after the Surge." *New York Times*. January 17, 2014. http://www.nytimes.com/2014/01/18/your-money/navigating-a-new-health-plan-after-the-surge.html?r=0

11. Connect for Health Colorado. *Board of Directors Meeting Minutes for December 23rd, 2013*. http://connectforhealthco.com/wp-content/uploads/2013/04/20131223-Meeting-Minutes.pdf

12. Boulton, Clint. "IBM Software Blamed for Health Exchange Woes." *Wall Street Journal*. January 24, 2014. http://online.wsj.com/news/articles/SB10001424052702304632204579336802097413212?mg=reno64-wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424052702304632204579336802097413212.html

13. Snowbeck, Christopher. "MNSure Won't Meet Goals, Report Says, and Revamp on the Table." *Twin Cities Pioneer Press*. January 22, 2014. http://www.twincities.com/politics/ci_24968268/mnsure-will-not-meet-goals-study-says-starting

14. Snowbeck. 2014

15. Moini, Nina. "MNsure site improving, but budget remains shaky." *CBS Minnesota*. February 12, 2014. http://minnesota.cbslocal.com/2014/02/12/mnsure-interim-ceo-touts-beleaguered-sites-improvements/

16. Sun. 2013

17. Cohn, Meredith. "Technical Problems Mar Insurance Purchase." *Baltimore Sun*. January 27, 2014. http://www.baltimoresun.com/health/blog/bs-hs-buying-insurance-20140125,0,4047263.story#ixzz2rbxOgw00

18. Bell, Brad. "Maryland Health Care Exchange Issues Prompts Plans for Retroactive Insurance." Associated Press. January 14, 2014. http://www.wjla.com/articles/2014/01/maryland-healthcare-exchange-issues-prompts-plans-for-retroactive-insurance-99238.html

19. Johnson, Jenna. "Maryland officials explore options for health insurance exchange." *Washington Post*, February 10, 2014. http://www.washingtonpost.com/local/md-politics/md-officials-seeking-options-for-health-insurance-exchange/2014/02/10/06dcb672-927c-11e3-84e1-27626c5ef5fb_story.html

20. Johnson, Jenna. "O'Malley signs first bill of the year, helping uninsured who had problems with exchange." *Washington Post*. January 30, 2014. http://www.washingtonpost.com/local/md-politics/omalley-signs-first-bill-of-the-year-helping-uninsured-who-had-problems-with-exchange/2014/01/30/68b1cefc-89c9-11e3-833c-33098f9e5267_story.html

21. Cheney, Kyle, and Jason Millman. "State Exchanges Hitting Data Snags, Too." *Politico*. December 6, 2013. http://www.politico.com/story/2013/12/obamacare-state-exchanges-technical-glitches-100757_Page2.html#ixzz2miDhhpNM; "Report from the Maryland Health Benefit Exchange about Maryland Health Connection, the State-Based Health Insurance Marketplace, as of Wednesday, November 27, 2013." *Maryland Health Connection*. November 27, 2013. http://marylandhealthconnection.gov/assets/MHC_Nov_27_UPDATE.pdf

22. Olson, Jeremy. "MNsure Applications Double as State Works to Fix Glitches." *Star Tribune*. December 5, 2013. http://dhmh.maryland.gov/docs/JMS%20testimony%20with%20appendices%20-%20011414.pdf Maryland Department of Health and Mental Hygiene. *Testimony of DHMH Secretary Joshua Sharfstein to the Maryland House of Delegates*. January 14, 2014. http://dhmh.maryland.gov/docs/JMS%20testimony%20with%20appendices%20-%20

011414.pdf

23. Budnick, Nick. "Cover Oregon: Some Progress, but Key Fix Could Take a While." *Oregonian*. October 10, 2013. http://www.oregonlive.com/health/index.ssf/2013/10/cover_oregon_some_progress_but.html

24. Budnick, Nick. "Cover Oregon: Health Exchange Workers Will Review Eligibility Manually until Online Enrollment Is Fixed." *Oregonian*. October 17, 2013. http://www.oregonlive.com/health/index.ssf/2013/10/cover_oregon_health_exchange_w.html

25. Hunsberger, Brent. "Cover Oregon: Health Exchange to Hire 400 to Process Paper Applications." *Oregonian*. November 7, 2013. http://www.oregonlive.com/finance/index.ssf/2013/11/oregons_health_exchange_to_hir.html

26. Budnick, Nick. "Cover Oregon Personnel Change, Application Fairs and Action Plan Could Boost Enrollment." *Oregonian*. November 22, 2013. http://www.oregonlive.com/health/index.ssf/2013/11/cover_oregon_personnel_change.html

27. KGW Staff and Associated Press. "Cover Oregon Leaders Consider Scrapping Site." *KGW.com*. January 16, 2014. http://www.kgw.com/news/Lawmakers-grill-Cover-Oregon-leader-over-problems-240381331.html

28. Zheng, Yuxing. "Cover Oregon: Lawmakers Plan Fixes to Help More People Obtain Coverage, Subsidies." *Oregonian (Oregon Live)*. January 24, 2014. http://www.oregonlive.com/politics/index.ssf/2014/01/cover_oregon_lawmakers_plan_to.html

29. Associated Press. "Cover Oregon launches website for agents." *KGW.com*. February 18, 2014. http://www.kgw.com/news/local/Cover-Oregon-launches-website--for-agents-246021561.html

30. "Third State Fires Health Exchange Director as Enrollments Lag." Associated Press. December 8, 2013. http://www.modernhealthcare.com/article/20131208/INFO/312089998/third-state-fires-health-exchange-director-as-enrollments-lag#; Nord, James. "MNsure Shakeup: Executive Director Todd-Malmlov out, as Problems and Political Pressure Persist." *MinnPost*. December 18, 2013. http://www.minnpost.com/political-agenda/2013/12/mnsure-shakeup-executive-director-todd-malmlov-out-problems-and-political-p

31. Pear, Robert. "Troubleshooter Reports Progress and Barriers in Bid to Repair Health Portal." *New York Times*. November 1, 2013. http://www.nytimes.com/2013/11/02/us/politics/day-1-on-healthcaregov-fewer-than-a-dozen-signed-up.html?src=recg

32. Because our focus is on states using the federal Marketplace, we focus the discussion on the relationship between Medicaid and healthcare.gov.

33. For states that elected to have the federal Marketplace make Medicaid/CHIP determinations (such as Alabama), it does so only for populations subject to the ACA's new MAGI standard. As mentioned earlier, the Marketplace does not make eligibility determinations for populations exempt from the MAGI standard (including those eligible on the basis of age, blindness, or disability), for any state.

34. Keays. "Exchange and Medicaid IT System Contracts."

35. Cheney, Kyle. "Medicaid Could Be the Next Headache for Obamacare." *Politico*. October 24, 2013. http://www.politico.com/story/2013/10/medicaid-could-be-the-next-headache-for-obamacare-98760.html#ixzz2jgbEgf5S

36. See Pérez-Peña, Robert, Abby Goodnough, and Gina Denis. "As Demand Stays High, Officials Try to Address Problems in Exchanges." *New York Times*. October 2, 2013. http://www.nytimes.com/2013/10/03/us/problems-persist-on-second-day-of-insurance-markets.html; Morgan, David, and Lewis Krauskopf. "U.S. Government Scrambles to Provide Access to Obamacare Sites." Reuters. October 2, 2013. http://www.reuters.com/article/2013/10/02/us-usa-healthcare-idUSBRE98T14R20131002; Weaver, Christopher, Shira Ovide, and Louise Radnofsky. "Software, Design Defects Cripple Health-Care Website." *Wall Street Journal*. October 6, 2013. http://online.wsj.com/news/articles/SB10001424052702304441404579119740283413018

37. Somashekhar, Sandhya, and Amy Goldstein. "Full Testing of HealthCare.gov Began Too Late, Contractors Say." *Washington Post*. October 24, 2013. http://www.washingtonpost.com/politics/house-panel-grills-contractors-on-troubled-health-insurance-web-site/2013/10/24/8f42c748-3ca7-11e3-b7ba-503fb5822c3e_story.html

38. "A Timeline of the Affordable Care Act." *Washington Post*. November 2, 2013. http://www.washingtonpost.com/politics/2013/11/02/76b6f9b6-43f9-11e3-a751-f032898f2dbc_story.html

39. Pear, Robert, and Sharon LaFraniere. "Promised Fix for Health Site Could Squeeze Some Users." *New York Times*. October 25, 2013. http://www.nytimes.com/2013/10/26/us/politics/general-contractor-named-to-fix-health-web-site.html

40. Mangan, Dan. "White House Names Former Microsoft Exec to Run Healthcare.gov." *CNBC*. December 17, 2013. http://www.cnbc.com/id/101279510

41. Bataille, Julie. "Operational Progress Report." *HHS.gov* Digital Strategy. December 2, 2013. http://www.hhs.gov/digitalstrategy/blog/2013/12/operational-progress-report.html

42. Pear, Robert. "Enrollment Errors Put Medical Coverage at Risk." *New York Times*. December 6, 2013. http://www.nytimes.com/2013/12/07/us/politics/flaws-in-enrollment-records-for-insurance-exchange.html?_r=0

43. Pear, Robert. "Enrollment Errors Cut, Officials Say: Fixes Are Overstated, Insurers Report." *New York Times*. December 14, 2013. http://www.nytimes.com/2013/12/15/us/enrollment-errors-cut-officials-say-fixes-are-overstated-insurers-report.html

44. National Association of State Medicaid Directors. *ACA Implementation Snapshot – Open Enrollment, Week 10*. December 16, 2013. http://medicaiddirectors.org/sites/medicaiddirectors.org/files/public/snapshot_week_10_final.pdf

45. Kliff, Sarah. "HealthCare.gov Is Having Trouble Signing People up for Medicaid." *Washington Post*. December 4, 2013. http://www.washingtonpost.com/blogs/wonkblog/wp/2013/12/04/healthcare-gov-is-having-trouble-signing-people-up-for-medicaid/

46. National Association of State Medicaid Directors. 2013.

47. Meyers, Jessica. "Tech Official: Up to 40% of Obamacare Work Left." *Politico*. November 19, 2013. http://www.politico.com/story/2013/11/tech-chief-didnt-see-march-obamacare-memo-100058.html

48. Cheney, Kyle. "HHS Feared Contractor Would Derail Obamacare." *Politico*. January 16, 2014. http://www.politico.com/story/2014/01/healthcare-gov-obamacare-contractor-102291.html

49. HIPSM relies on three years of the American Community Survey and thus is representative at the state level. For our purposes, the model estimates in a consistent manner the population with income between 138 percent and 400 percent of the federal poverty level (FPL) that does not have an affordable employer offer of health insurance coverage and uses model parameters to estimate HIM enrollment. We then scale the HIPSM estimates of enrollment at full implementation down to agree with the Congressional Budget Office (CBO)'s original estimates of enrollment—7.0 million—in December 2014. CBO's more recent projection of 6.0 million enrollees (released on February 5, 2014) through December 2014 reflects reduced enrollment due to the problematic IT system rollout; we do not use the more recent projections because our analysis attempts to assess IT system performance independently. For more

information about HIPSM see "The Urban Institute's Health Microsimulation Capabilities." Washington, DC: The Urban Institute. 2010.

50. In some (though not all) cases, the DHHS estimates included in a publicly-available September 2013 memorandum to HHS Secretary Kathleen Sebelius are based on states' own projections, and because of different methodologies there is considerable variation among states in DHHS-projected enrollment. The resulting estimates of enrollment relative to projections can produce misleading conclusions about success.

51. Centers for Medicare and Medicaid Services at the US Department of Health and Human Services, *Medicaid & CHIP: December Monthly Applications and Eligibility Determinations Report*, January 22, 2014, http://www.medicaid.gov/AffordableCareAct/Medicaid-Moving-Forward-2014/Downloads/December-2013-Enrollment-Report.pdf

52. Oregon has sent out notices to 260,000 people enrolled in the state's SNAP (food stamps) program informing them that based on their income they pre-qualify for the expanded Medicaid program as of January 1, 2014. Those who wish to enroll must make a phone call or send a form in as their consent. See: Lewandowski, Kate and Katherine Howitt. "Enrolling Thousands of Medicaid Beneficiaries is a Snap (Pun Intended!)" Community Catalyst, October 29, 2013. http://www.communitycatalyst.org/blog/enrolling-thousands-of-medicaid-beneficiaries-is-a-snap-pun-intended#.Uo0k27Eo4dU

53. DHHS Office of the Assistant Secretary for Planning and Evaluation, Health Insurance Marketplace: February Enrollment Report, 2/12/14, http://aspe.hhs.gov/health/reports/2014/MarketPlaceEnrollment/Feb2014/ib_2014feb_enrollment.pdf

54. Three of the study states (Maryland, New York, and Oregon) received an "Early Innovator" grant from DHHS in 2011 to facilitate Marketplace IT development. See "States Leading the Way on Implementation: HHS Awards "Early Innovator" Grants to Seven States." *Centers for Medicare and Medicaid Services*. February 16, 2011. http://www.cms.gov/CCIIO/Resources/Grants/states-leading-the-way.html

55. Naylor, Brian. "Feds Have Troubled History With New Computer Systems." *NPR*. November 26, 2013. http://www.npr.org/2013/11/26/247297848/feds-have-troubled-past-with-new-computer-systems

56. Cooper, Jonathan J. "Fewer Enrollments Challenge Oregon Exchange Budget." Associated Press. December 8, 2013. http://www.sfgate.com/news/article/Fewer-enrollments-challenge-Oregon-exchange-budget-5046433.php

About the Authors and Acknowledgements

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