

A publication of the Centers for Medicare & Medicaid Services, Office of Information Products & Data Analytics

Lessons from Early Medicaid Expansions Under Health Reform: Interviews with Medicaid Officials

Benjamin D. Sommers, ¹ Emily Arntson, ¹ Genevieve M. Kenney, ² Arnold M. Epstein ¹ Harvard School of Public Health—Department of Health Policy & Management ² Urban Institute

Background: The Affordable Care Act (ACA) dramatically expands Medicaid in 2014 in participating states. Meanwhile, six states have already expanded Medicaid since 2010 to some or all of the low-income adults targeted under health reform. We undertook an in-depth exploration of these six "early-expander" states—California, Connecticut, the District of Columbia, Minnesota, New Jersey, and Washington—through interviews with high-ranking Medicaid officials.

Methods: We conducted semi-structured interviews with 11 high-ranking Medicaid officials in six states and analyzed the interviews using qualitative methods. Interviews explored enrollment outreach, stakeholder involvement, impact on beneficiaries, utilization and costs, implementation challenges, and potential lessons for 2014. Two investigators independently analyzed interview transcripts and iteratively refined the codebook until reaching consensus.

Results: We identified several themes. First, these expansions built upon pre-existing state-funded insurance programs for the poor. Second, predictions

about costs and enrollment were challenging, indicating the uncertainty in projections for 2014. Other themes included greater than anticipated need for behavioral health services in the expansion population, administrative challenges of expansions, and persistent barriers to enrollment and access after expanding eligibility—though officials overall felt the expansions increased access for beneficiaries. Finally, political context—support or opposition from stakeholders and voters—plays a critical role in shaping the success of Medicaid expansions.

Conclusions: Early Medicaid expansions under the ACA offer important lessons to federal and state policymakers as the 2014 expansions approach. While the context of each state's expansion is unique, key shared experiences were significant implementation challenges and opportunities for expanding access to needed services.

Keywords: Health Policy, Politics, Law, Regulation, Medicaid, Qualitative Research, State Health Policies

ISSN: 2159-0354

doi: http://dx.doi.org/10.5600/mmrr.003.04.a02

Medicare & Medicaid Research Review 2013: Volume 3, Number 4

Mission Statement

Medicare & Medicaid Research Review is a peerreviewed, online journal reporting data and research that informs current and future directions of the Medicare, Medicaid, and Children's Health Insurance programs. The journal seeks to examine and evaluate health care coverage, quality and access to care for beneficiaries, and payment for health services.

http://www.cms.gov/MMRR/

U.S. Department of Health & Human Services
Kathleen Sebelius
Secretary

Centers for Medicare & Medicaid Services

Marilyn Tavenner

Administrator

Editor-in-Chief
David M. Bott, Ph.D.

The complete list of Editorial Staff and Editorial Board members may be found on the MMRR Web site (click link): $\underline{ MMRR \ Editorial \ Staff \ Page}$

Contact: mmrr-editors@cms.hhs.gov

Published by the Centers for Medicare & Medicaid Services.

All material in the *Medicare & Medicaid Research*Review is in the public domain and may be duplicated without permission. Citation to source is requested.

Introduction

The United States stands on the verge of a dramatic expansion in health insurance coverage, unprecedented since the creation of Medicare and Medicaid in 1965. Starting in January 2014, coverage through expanded Medicaid eligibility and subsidies for health insurance purchases though Marketplaces1 will extend coverage to tens of millions of Americans (Elmendorf, 2012). In the face of daunting implementation challenges, early lessons about such expansions would be valuable to federal and state policymakers, as well as numerous stakeholders. Since the passage of the Affordable Care Act (ACA) in March 2010, six states or jurisdictions-California, Connecticut, the District of Columbia, Minnesota, New Jersey, and Washington—have enacted Medicaid expansions that include some or all of the low-income adults who will become eligible for Medicaid, starting in 2014, under the ACA (The Henry J. Kaiser Family Foundation, 2012a).

The ACA offered states the opportunity to expand eligibility to low-income adults at or below 133% of the federal poverty level (FPL) before the national 2014 expansion. Unlike the 2014 expansion, these early expansions were subject to the state's baseline match rate (Federal Medical Assistance Percentage, or FMAP), rather than the 100% initial federal funding (and 90% in the longrun) offered by the ACA for newly-eligible adults in 2014 (The Henry J. Kaiser Family Foundation, 2013b). In these early expansions, states also had the flexibility to choose an eligibility threshold below 133% of FPL, expanding coverage to only

¹ The original interviews were conducted before the terminology shifted from Exchanges to Marketplaces, and our interview guide referred to Exchanges. However, in keeping with the current terminology, we refer throughout this article to Marketplaces.

a subset of the ACA's ultimate target Medicaid population. In either case, these early expansions were generally considered a bridge to 2014, at which point eligibility will be expanded to 133% of FPL (138%, when including a 5% income disregard), with the FMAP for these individuals rising to 100%.

The impending 2014 Medicaid expansion features numerous policychallenges and unanswered questions. We conducted in-depth interviews with high-ranking Medicaid officials in these six early expanding states (for brevity, we hereafter refer to the District of Columbia as a "state") to glean important lessons from their experiences.

Our analysis builds on a conceptual model and recent empirical research on challenges facing the Medicaid expansion. Our conceptual model came from Eisenberg and Power's description of access to care in the U.S. health care system. In their seminal paper (Eisenberg & Power, 2000), the authors describe how multiple barriers to effective heath care exist in the U.S., pre-ACA system, each one a "voltage drop" that may lead to the loss of potential for better care. In particular, our analysis focused on the following voltage drops identified in that model: (1) insurance availability, (2) enrollment in insurance, (3) provider and services covered, (4) choice of plans and providers, (5) consistent source of primary care available, and (6) referral services accessible.

In addition to this conceptual model, the existing research literature identifies several pressing issues facing states and the federal government related to the Medicaid expansion and the Affordable Care Act. These topics included the political considerations shaping whether states choose to expand Medicaid now that the Supreme Court has given them the option of whether to do so (Sommers & Epstein, 2013), how successful attempts will be to enroll newly-eligible individuals (Holahan & Headen, 2010; Kenney, Lynch, Haley,

& Huntress, 2012; Sommers & Epstein, 2010), the impact of expansions on access to care and utilization (Baicker et al., 2013; Finkelstein et al., 2011; Sommers, Baicker, & Epstein, 2012), how the health needs of the expansion population compare to those of current Medicaid enrollees (Decker, Kostova, Kenney, & Long, 2013), how much these expansions will cost (Buettgens, Garrett, & Holahan, 2010; Elmendorf, 2010), and whether there will be adequate provider capacity to care for these individuals (Cunningham, 2011; Decker, 2012). Furthermore, it is not clear how states will address the administrative challenges associated with the expansion, including updating eligibility systems and interacting with new health insurance Marketplaces (Sommers & Rosenbaum, 2011).

Our study's objective was to explore these key questions through rigorous qualitative analysis of interviews with Medicaid officials in the six early-expanding states, in order to identify potential insights that can be useful to policymakers elsewhere, as we approach the 2014 Medicaid expansion.

Methods

Study Design

Our study used semi-structured interviews and a qualitative data analysis to explore the experiences of high-ranking Medicaid officials in all six states that have implemented Medicaid expansions since the ACA's passage in 2010: California, Connecticut, the District of Columbia, Minnesota, New Jersey, and Washington.

Our target study sample was one or two officials in each state, including either the Medicaid Director or other state officials with significant oversight responsibilities for the state's Medicaid expansion (such as the Secretary of the Department administering the Medicaid program). We reached out directly to state officials with the assistance of the Center for Health Care Strategies, a non-profit

organization that provides technical assistance to state Medicaid officials across the country. We invited each official to participate in an indepth telephone interview exploring the state's experiences with the early Medicaid expansion, and lessons learned for the implementation of the Affordable Care Act.

Our study was exempted from review by the Harvard Institutional Review Board, since the research was based on interviews with public officials about their public roles. We had a 100% participation rate among contacted officials. Our final sample consisted of 11 officials from six states, and included either the Medicaid director or the director's immediate supervisor in each state. In several states, additional staff members with expertise on the expansions participated in the interviews or in follow-up communications. To protect the confidentiality of study participants, we are unable to provide a more detailed list of official titles or state of origin for each respondent.

Interviews

The interview guide was developed by the authors in collaboration with experts on state Medicaid policy, based on our conceptual model and a review of previous research related to the upcoming Medicaid expansion under the ACA. Based on Eisenberg and Power's "voltage drop" model, our interview guide focused on several key potential barriers to care for low-income individuals eligible for Medicaid, including outreach and enrollment (relevant to voltage drops #1 and #2, as discussed in the Introduction), covered services (#3), managed care network adequacy and provider participation (#4 and #5), and specialty care and areas of particularly high utilization (#6). We then developed questions related to some of the key implementation challenges identified in the research literature reviewed in the Introduction: take-up among eligible adults; challenges in cost and enrollment projections; contending with political factors and stakeholder support, or opposition, to expanding Medicaid; low provider payment rates; and the overall impact on beneficiaries of obtaining Medicaid coverage.

The interviews used a series of open-ended questions exploring topics including enrollment progress; pre-existing coverage options; outreach efforts; barriers to enrollment; the role of managed care plans; the level of support and involvement from stakeholders, including providers, hospitals, and the business community; impacts of coverage on beneficiaries; costs of the expansion; administrative challenges; and lessons for 2014 (see Appendix Exhibit A-1 for a complete list of interview topics). The interview guide was pilot-tested and refined with a former Medicaid director familiar with these substantive policy issues. Before each interview, archival research was conducted to identify key features of each state's Medicaid program and expansion, based on existing publicly-available documents.

Interviews were conducted between December 2012 and February 2013. At the outset of each interview, the interview subjects were informed of the purpose of the study and given the opportunity to ask clarifying questions; the researchers emphasized the voluntary and confidential nature of participation in the study. With the permission of the interview respondents, all interviews were recorded and transcribed verbatim. Follow-up communications by phone or email were used to clarify any ambiguities raised during the initial interview.

Data Analysis

Analysis followed descriptive methods of qualitative data analyses (Boyatzis, 1998), using the interview transcripts and the written notes made during the interviews.

The first step in data analysis was a deductive analysis in which responses were grouped by specific questions. A pre-specified codebook was created using the anticipated themes of the interviews, based on prior research and our conceptual model of factors and policies affecting coverage and access to care among low-income Americans. Thematic coding was conducted by two of the study authors. Using NVivo qualitative analytical software (NVivo software, 2010), we tested our initial codes against the interview transcripts and modified our codes as needed by adding additional themes that we did not anticipate, eliminating redundant themes or those that were not addressed by respondents, and clarifying codes for overlapping themes that needed to be further distinguished. After initial review of the transcripts, we reviewed our updated codebook, and in any areas of disagreement, conferred until we came to consensus on the final codes. Each of the two authors then completed their coding independently using the refined codebook, and inter-rater reliability statistics were calculated. After the interview data were fully coded, we identified the number of states with officials voicing each theme in the final codebook, and the number of times each theme was mentioned by the respondent(s) as a discrete point of discussion in the interview.

Finally, we used thematic content analysis to identify policy-relevant themes that emerged from the data and to identify quotations that exemplified key themes. All specific quotations included in this manuscript were approved by the interviewee in question, per the study protocol.

Limitations

A major limitation of our analysis is that the six sample states analyzed in this study differ in many ways from other states in the rest of the country. We discuss this issue at more length below, underscoring the pre-existing insurance options and generally supportive political environment for implementing a Medicaid expansion in all six states. For instance, all six states in our study elected to expand Medicaid when they would receive only their traditional match rate and would have to spend state funds to cover a significant share of the costs. Clearly, these states differ significantly from many other states that are currently opposed or undecided about expanding Medicaid in 2014, even when they will receive 100% federal funding for newly-eligible individuals. Nevertheless, many of the lessons drawn from the experiences in these states have broad implications for the substantial portion of the country that will implement Medicaid expansions or is still deciding whether to do so.

Another limitation is that our sample was limited to high-ranking Medicaid officials. This was by design, as these officials are perhaps best situated to offer insights and an overview of the challenges and successes of implementing a major Medicaid expansion, and have sufficient expertise and experience to comment meaningfully on a broad range of topics. However, this approach means that other viewpoints—such as those of legislators, providers, and Medicaid beneficiaries themselves—are only reflected through the perceptions of the Medicaid officials. Moreover, it is possible that lower-level officials might have had deeper knowledge of what actually took place "on the ground." Research exploring the experiences of some of these other groups would add useful context to our findings.

Finally, it is possible that the officials we interviewed were guarded in their statements, recognizing the potential political implications of their assessments, or alternatively crafted responses (either positive or negative) that they felt would

be in keeping with the study's objectives, and thus were subject to a form of social desirability bias. This is an inherent limitation of qualitative research, particularly with public officials, and our study took aim to reduce these potential biases by guaranteeing confidentiality and using an openended interview guide designed to be as neutral and non-directive as possible.

Results

Exhibit 1 summarizes selected key features of the six state Medicaid expansions included in our study, based on publicly-available documents and data gathered during our interviews and follow-up communications with state officials. The income eligibility threshold in each state varied significantly,

Exhibit 1. Details on the Study States' Medicaid Expansions Since 2010

	Eligibility Expar	Medicaid Expansion Enrollment (2012)†				
	Expansion Population ,					Pre-ACA
	as percentage of		Total	Transfer from		Medicaid
	the Federal Poverty		Expansion	Previous State	New	Enrollment
State	Level (FPL)	Start Date	Enrollment	Program	Enrollment	(2009)
California	Varies by county, up to 200% FPL	7-1-2011	499,000	59,000	440,000	6,900,000
Connecticut	Up to 56% FPL	4-1-2010	81,000	45,000	36,000	444,000
District of Columbia	Up to 200% FPL	7-1-2010	44,000	34,000	10,000	131,000
Minnesota	Up to 75% FPL	3-1-2011	84,000	77,000	7,000	664,000
New Jersey	Up to 23% FPL	4-14-2011	44,000	44,000	0	812,000
Washington	Up to 133% FPL, limited to prior state plan enrollees	1-3-2011	41,000	41,000	0*	969,000

NOTES:

CA: Based on state enrollment statistics for new versus existing adults in the Low Income Health Program, as of December 2012. California Department of Health Care Services. Quarterly Reports - Applicants, Enrollment, and Appeals and Grievances. Sacremento, CA; 2013. Available at: http://www.dhcs.ca.gov/provgovpart/Documents/LIHP/Reports/DY%208-Qtr%202_Enrl_Rpt.pdf.

CT: Based on comparison of original enrollment after transfer from State Administered General Assistance program as of April 2010, versus overall program enrollment in July 2012.

DC: Based on January 2012 enrollment estimate from Kaiser Family Foundation, and estimated transfer of 34,000 from DC Health Alliance. DC Fiscal Policy Institute. The District of Columbia's Healthcare Alliance. Washington, DC; 2012. Available at: http://www.dcfpi.org/wp-content/uploads/2009/03/4-27-12-Alliance-Brief-FINAL1.pdf

MN: Based on comparison of MinnesotaCare and General Assistance Medical Care populations that were transitioned to Medicaid at the outset of the expansion, versus average monthly enrollment for the expansion group for July–December 2012.

NJ: From official New Jersey Division of Medical Assistance and Health Services enrollment statistics, as of December 2012, in the General Assistance program that was converted into Medicaid under the state's expansion.

WA: From enrollment statistics provided by the state, as of December 2012.

SOURCES: Authors' interviews with state officials, published enrollment statistics, and Kaiser Family Foundation reports (Kaiser Commission on Medicaid and the Uninsured, 2012d). Enrollment figures were rounded to the nearest thousand and represent average monthly enrollment—see full details below.

^{*} Approximately 82,000 people lost coverage between 2009 and 2012, compared to previous enrollment in Washington's state-funded health insurance program enrollment.

[†] New versus transferred enrollment estimates come from the following sources (See Appendix for full references):

with some only expanding Medicaid to groups with incomes far below 133% of federal poverty level (the cutoff that will take effect under the Affordable Care Act), while others offered the option of coverage as high as 200% through Section 1115 waivers.

Expansion enrollment figures from administrative data vary widely by state, from roughly 40,000 enrollees in the District of Columbia to nearly half a million in California, representing anywhere from a 4% increase (Washington) to a 31% increase (DC) relative to baseline Medicaid enrollment. In all states, many enrollees had been previously covered in state or local programs; four states also enrolled significant numbers of new individuals, either through less restrictive eligibility requirements or improved take-up rates.

Exhibit 2 shows the results of our coding analysis for the interview transcripts, with the numbers of states whose official(s) voiced each coded topic and the frequency each topic was mentioned during the interviews. Inter-rater reliability using the final coding scheme was good, with 95.4% agreement across all codes and an average kappa statistic of 0.61.

The most commonly voiced topics—mentioned more than 30 times in all 6 states—were challenges in predicting expansion enrollment or costs, impact of the early expansion on planning for the 2014 Medicaid expansion, and the relationship between the expansion and each state's preexisting insurance programs. Closely following in frequency was the use of behavioral health

Exhibit 2. Frequency of Topics Mentioned by Interview Subjects (N = 11)

		Number (Percent)	
	Times	of	States
Торіс	Mentioned	Mentioning, $N = 6$	
Predicting expansion costs & enrollment	34	6	(100)
Impact of early expansion on planning for 2014 (including MAGI conversion and Marketplace coordination)	31	6	(100)
Expansion's relationship with pre-existing insurance programs in the state	31	6	(100)
Use of behavioral health and substance abuse services in expansion population	27	5	(83)
Role of managed care	24	5	(83)
Stakeholder support for expansion	22	6	(100)
Outreach efforts to enroll eligible individuals	19	6	(100)
Administrative challenges faced by the state	18	6	(100)
Benefits to newly-enrolled individuals of Medicaid coverage	13	6	(100)
Remaining barriers to enrollment, need for application streamlining	11	5	(83)
Impact of provider payment and primary care pay increase on Medicaid providers	9	6	(100)
Woodwork effect	9	6	(100)
Possibility of decline in the match rate under the ACA	7	6	(100)
Political context in the state (not including stakeholder support)	7	4	(67)
Remaining barriers to access to care	5	3	(50)

NOTE: "Times mentioned" is the number of times each theme was mentioned by the respondent(s) as a discrete point of discussion in the interview, based on thematic coding conducted by the authors.

SOURCE: Authors' analysis of interviews with state Medicaid officials.

and substance abuse services in the expansion population, mentioned 27 times and in all but one state. Two of these issues—mental health services and pre-existing coverage—had not appeared in our initial list of potential themes, but the consistency with which officials raised them led to their being prominently featured in the final analysis.

In terms of the impact of the expansions on newly-eligible individuals, comments about benefits of improved coverage, access to care, and/ or health were mentioned 13 times, in all 6 states. Meanwhile, remaining barriers to enrollment were mentioned 11 times in 5 states, and remaining barriers to access to care were less frequently discussed—5 times in 3 states.

The next section discusses the major policy implications of our findings, and presents some of the most relevant quotations from officials on these issues.

Discussion

Exhibit 3 summarizes the key themes and policy lessons that emerged in our analysis of the interviews that had particular relevance for 2014.

Lesson #1: Many Medicaid expansions are occurring in states with pre-existing state health insurance programs for low-income adults.

The changes in Medicaid eligibility in these six states were not simple insurance expansions in that they all, to some extent, built upon or replaced preexisting state- or locally-funded health insurance programs for the poor, as described in **Exhibit 1**. In fact, in one state (Washington), the coverage impact of the Medicaid expansion was more than offset by an even larger cutback in the state's other insurance options—though without the Medicaid expansion,

Exhibit 3. Key Themes from Interviews with Medicaid Officials in Early Expanding States

Lesson #1:

Many Medicaid expansions are occurring in states with pre-existing state health insurance programs for low-income adults.

Lesson #2:

Expansion-related predictions are challenging.

Lesson #3:

Barriers to coverage and access remain, even after expanding eligibility.

Lesson #4:

Behavioral health is a critical need for this population.

Lesson #5:

While the early expansion required significant administrative efforts to implement, these Medicaid programs—like those in all states—still face major implementation challenges for 2014.

Lesson #6:

The so-called "woodwork effect" (this is when uninsured individuals who were previously eligible for Medicaid before the ACA "come out of the woodwork" and sign up for coverage) was not apparent in these early expansions, but it would be premature to rule it out even in states that choose not to expand.

Lesson #7:

Political context matters a great deal in implementing a Medicaid expansion.

SOURCE: Authors' analysis of interviews with state Medicaid officials.

there was a real possibility that thousands more would have lost coverage, because of budget cuts (Washington Health Care Authority, 2012). In all cases, state officials described the early expansions as, in part, a way to capitalize on the availability of federal funding to subsidize coverage the states had already been paying for with local dollars.

Despite the fact that these expansions built on pre-existing programs, four states—California, Connecticut, the District of Columbia, and Minnesota—expanded insurance to a significant number of new individuals who had not previously

received public coverage. Officials in these states felt the Medicaid expansion offered the possibility of significant improvements in health and access to care, both by enrolling new individuals and by expanding the generosity of covered services compared to the previous state or local program. Exhibit 4 lists details of pre-existing programs and changes in benefit packages due to the expansion. As one Medicaid director said, "It's both improved access and health, and providing reimbursement revenue." Officials mentioned potential gains from enhanced primary care

Exhibit 4. Information on Study States' Pre-Existing Health Insurance Programs

		-	Enrollment		
	Pre-existing State	Pre-existing Eligibility Cutoffs	Cap in the Pre-Existing	Significant changes in benefits under Medicaid	
	or Local Insurance	for Parents and	Program	expansion (compared to pre-	
State	Program(s)	Childless Adults	(Y/N)	existing program)	
California	* County programs under the Health Care Coverage Initiative (HCCI)†	* Varies by county, up to 250% FPL for medically indigent adults	Varied by county; federal funds were capped for the program	After expansion: • Federal Medicaid managed care requirements, including network adequacy • Required inclusion of at least one federally-qualified health center in each county network • Require out-of-network Emergency Room and post-stabilization coverage for those <133% FPL • Comprehensive insurance in place of coverage in some counties that was limited to care for specific chronic conditions	
Connecticut	* State Administered General Assistance (SAGA) * Husky A	* 56% FPL for all adults in SAGA, with asset test (eliminated under Medicaid expansion) * 185% for low- income parents in Husky A	No	 After expansion: Expanded provider network Enhanced coverage for medical transportation Coverage for long-term care, home health, and skilled nursing facility services 	

(Continued)

Exhibit 4 Continued. Information on Study States' Pre-Existing Health Insurance Programs

EXIIIDIC 4 COII	Enrollment			
		Pre-existing	Cap in the	Significant changes in
	Pre-existing State	Eligibility Cutoffs	Pre-Existing	benefits under Medicaid
	or Local Insurance	for Parents and	Program	expansion (compared to pre-
State	Program(s)	Childless Adults	(Y/N)	existing program)
District of	* DC Healthcare	* 200% of FPL	No	After expansion:
Columbia	Alliance			• Expanded mental health coverage (excluded from DC Healthcare Alliance benefit package, other than those eligible for services directly from the Department of Mental Health)
				 Expanded pharmacy benefits
Minnesota	* General Assistance Medical Care (GAMC) * MinnesotaCare	* 75% FPL in GAMC, with asset test (eliminated under Medicaid expansion) * 250% FPL in MinnesotaCare	Yes - total state funds were capped; when cap was exceeded, state reduced benefits or scaled back eligibility.	 After expansion: New benefit of non-emergency medical transport New coverage for long-term care Elimination of inpatient cost-sharing and annual inpatient limit for those previously in MinnesotaCare
New Jersey	* General Assistance (GA)	* 24% FPL	No No	 After expansion: New substance abuse initiative for some beneficiaries Coverage continued to be limited to outpatient only, with <i>no</i> inpatient coverage in either GA or expanded Medicaid under the state's waiver
Washington	* Basic Health (BH) * Medical Care Services (MCS)	* 200% FPL for BH * Under 133% FPL for MCS	Yes	After expansion:Improved coverage of mental healthCare coordination services

NOTES:

SOURCES: Authors' interviews with state officials, and published documents (DC Fiscal Policy Institute, 2012; Harbage & King, 2012; Malloy, 2012; Washington Health Care Authority, 2012).

services and continuity of care, better mental health coverage, medical transportation, and expanded provider networks compared to preexisting programs. Looking ahead to the 2014 expansions, many states will be in similar circumstances. According to the Kaiser Family Foundation, as of 2012, 14 other states provide insurance to low-income

[†] California counties that have expanded coverage via Medicaid since 2010 include Alameda, Contra Costa, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Francisco, San Mateo, Santa Clara, Santa Cruz, Ventura, and 35 primarily rural counties that participate in the state's County Medical Services Program (CMSP).

adults that falls short of comprehensive Medicaid coverage, and 6 provide Medicaid to some, but not all, childless adults below 133% of the poverty level (The Henry J. Kaiser Family Foundation, 2012b). Thus, the early expanders' experience of building upon previous state expansions as well as extending coverage to new enrollees likely will also play out in more than a dozen other states in 2014. Previous research on the ACA has not given much attention to the distinctive challenges of converting statespecific programs over to Medicaid, requiring the use of different eligibility systems, new benefit designs, and the administrative task of transferring thousands of individuals from one plan to another. While the head start conferred by such pre-existing programs is notable, it did not preclude significant implementation challenges for the early expander states, as discussed in several of the lessons below.

Lesson #2: Expansion-related predictions are challenging.

Another recurring theme with particular relevance for the 2014 expansion was that enrollment and cost estimates proved challenging, often diverging significantly from the actual outcome. This was true even though these states had extensive experience with pre-existing programs covering their target populations. While some states did quite well in their projections, others underestimated costs and/or enrollment significantly; in our sample, no officials reported that they had significantly overestimated costs or enrollment.

In one state, enrollment rapidly outpaced projections and ultimately led to nearly twice as many new Medicaid beneficiaries in the first year than expected. The resulting budget pressure on the state (paying for 50% of the costs, as opposed to the more generous federal funding that begins in 2014) led legislators to consider cutting back the expansion (Associated Press, 2012), a proposal that was later denied by the Centers for Medicare

& Medicaid Services (Tavenner, 2013). Two other states experienced significantly more enrollment than expected (20–40% higher than predicted), but these programs were able to handle the unanticipated load with less difficulty.

In all cases, states used data from pre-existing coverage programs to estimate likely costs of the expansion. While several states were quite accurate in these estimates, one state reported that its initial per-member, per-month, capitation rates paid to managed care plans were significantly underestimated, by more than 12%. After an initial upward adjustment in rates, the state's costs remained stable subsequently, indicating the underestimate was not just a one-time surge in utilization, but appeared to be a persistently higher level of cost per member than expected. An official in that state explained, "Even having had experience with the population, we were surprised by the increased utilization and costs we saw when they transitioned to Medicaid and by how much we underestimated the necessary adjustment to the cap rates."

Looking ahead to 2014, these state experiences should be a note of caution in relying on highly-specific enrollment and cost estimates that are often cited in policy debates. How will the predictions for 2014 compare to these early expanders' experiences? On the one hand, the Medicaid expansions in these states built upon pre-existing programs, suggesting that their ability to make accurate projections should have been greater than will be the case for many states under the ACA. However, it is also possible that these more narrowlytargeted expansions received less attention or fewer resources necessary for making accurate projections than the broad-based expansion that will be implemented in 2014. Overall, our findings are consistent with previous research on projection models (Sommers, Swartz, & Epstein,

2011), which suggests that the true cost and enrollment impact of the Medicaid expansion is highly uncertain and policymakers should be prepared for a range of potential outcomes.

Lesson #3: Barriers to coverage and access remain, even after expanding eligibility.

State Medicaid directors with whom we spoke agreed that coverage and access to care had improved for both new Medicaid enrollees and for those transferred from less generous pre-existing programs. Nonetheless, most officials felt that barriers to coverage or care remained, with five states emphasizing the former and three states the latter.

In terms of coverage, several early expander states had difficulties enrolling very low-income adults and keeping them enrolled, in part because some of these adults experience transient housing and other unstable social circumstances. One official described this major challenge of "finding individuals, keeping them enrolled, getting them into coverage, and then into the care at the right places." Looking forward to 2014, the ability of states to achieve high enrollment rates, particularly among minorities, will be critical to efforts to reduce longstanding racial and ethnic disparities in care (Clemans-Cope, Kenney, Buettgens, Carroll, & Blavin, 2012). Several officials said that culturally- and linguisticallycompetent outreach conducted through community-based providers was one important means of overcoming these challenges.

Even after enrollment, officials in three states described reports of beneficiaries encountering challenges in obtaining care, though the officials generally lacked empirical data on this issue. Care coordination in fee-for-service Medicaid was one area of concern, and several officials lamented the shortage of providers in rural areas—though

they were quick to point out that this is not a new problem caused by the Medicaid expansion. While areas of provider shortage may be ameliorated by the ACA's increase in primary care payment rates in Medicaid for 2013-2014, state Medicaid directors were, as a group, fairly skeptical that the temporary pay increase would significantly increase provider participation in the program. One official summed up the consensus regarding the ACA's primary care pay increase, saying, "I don't think it's going to have a big impact ... It's going to stabilize our provider participation, but I don't think it's going to lead to additional participation." Previous research indicates that provider payment increases in Medicaid have significant, but small, impacts on access to care for certain services (Buchmueller, Orzol, & Shore-Sheppard, 2013); however, our findings suggest the inherent limitation of a shortterm payment increase, which may be insufficient to produce major changes in provider behavior. Of note, our sample states represented a wide range of provider participation in Medicaid at baseline, ranging from the nation's lowest at 40% in New Jersey to over 95% in Minnesota (Decker, 2012).

With regard to care coordination as a way of promoting more effective access to care, most officials were optimistic about the value of Medicaid managed care. One official argued that managed care plans "certainly provide [patients] more care management than we're able to do on the fee-for-service side, so I would say that our managed care folks really have an enhanced benefit compared to anyone who's on fee-for-service." As other states approach the 2014 expansion, it is clear that managed care will play a large role in many of them (Kaiser Commission on Medicaid and the Uninsured, 2012c). Despite this trend and general optimism among officials, empirical evidence on the impact of managed care in Medicaid, on costs and access, is quite mixed (Sparer, 2012), suggesting

additional research will be needed to evaluate this aspect of the expansion.

Lesson #4: Behavioral health is a critical need for this population.

Most of the Medicaid officials we interviewed commented that the expansion population had greater-than-expected use of behavioral health services, including substance abuse treatment exceeding the projections for utilization in those areas. In part, this is because the income-based eligibility criteria for childless adults opened doors to people with significant substance abuse problems, who did not previously qualify for Medicaid under federal disability criteria. One official explained, "They're extremely low-income and they don't have the kind of behavioral health problems that would qualify as a disabilitythat is, addiction is often their predominant disabling condition." Two states shared estimates on prevalence of substance abuse disorders for the newly-eligible population, ranging from 9% to 13%, similar to those from a recent study examining the potential 2014 Medicaid population (Decker et al., 2013). Meanwhile, an estimated 60% of those with mental illness also had a concurrent substance abuse disorder, according to one state's figures.

We identified two primary implications of the relatively high prevalence of behavioral health needs in the expansion population: First, it offers the possibility of major improvements in care for a population that has traditionally had difficulty obtaining needed services (Beronio, Po, Skopec, & Glied, 2013). Second, states will likely need to improve the availability and quality of mental health services, which requires both additional provider capacity and better care coordination for patients with complex behavioral health needs.

For those with mental health conditions, several officials felt the expansion had resulted in greater stability in their care, and that Medicaid brought significantly enhanced coverage of mental health services compared to the state programs in place beforehand. In terms of care coordination, one official described how the expansion "highlighted the difficulties in trying to operate a program and get services to people where you have fragmented medical, mental health, and substance abuse delivery systems." Several Medicaid officials voiced their preference that Medicaid beneficiaries with mental health conditions be placed in managed care, and expressed concern about the ability of patients with severe mental illness to coordinate their own care and to find specialty services without the structure of a managed care plan. For this reason, one state used a managed care carveout for behavioral health, while all other Medicaid services in the state remained fee-for-service. In contrast, one Medicaid director expressed concern that a managed care plan would have no more success in handling those with mental illnesses than a fee-for-service system would.

Finally, it is important to take these comments on mental health in context. Several officials noted that this pattern of high behavioral health needs is unlikely to be as pronounced in the 2014 expansion to 133% of the federal poverty level, because several of the early expansions targeted much lower-income individuals, who generally have higher rates of unemployment, substance abuse, and severe mental illness than adults with incomes closer to and above the poverty level (Levinson et al., 2010). Moreover, it is possible that Medicaid take-up was lower under these early expansions, without the added benefit of the individual mandate and public relations efforts that will occur in 2014, and therefore disproportionately drew in individuals who were in poor health.

Lesson #5: While the early expansion required significant administrative efforts to implement, these Medicaid programs—like those in all states—still face major implementation challenges for 2014.

Despite their experience over the past three years, most Medicaid officials in early expansion states felt they were still not fully prepared for the administrative challenges of the coming 2014 expansion. Nonetheless, there were some lessons to be learned from the bumps in the road they experienced during implementation.

Administrative challenges in the early expansions included the need to hire more staff (which was not always possible given budget constraints), the sometimes arduous transfer of beneficiaries from pre-existing programs to Medicaid, and the pure volume of new applications. An official in one state, for instance, reported that the staff had to manually transfer beneficiaries from the old state program's eligibility system to the Medicaid system: the transfers were "done the extremely old fashioned way," which required "printing out their eligibility information from one system and hand-entering it into another system." Another state reported that moving beneficiaries from one program to another was a "fair amount of work," although the transfer appeared seamless to the beneficiaries themselves.

Understandably, some states had to hire more staff (either at the state or county level) to administer the expanded Medicaid program. However, several states reported that they did not have to hire new staff, but managed with existing resources, or even had to cope with budget-related cutbacks in their program's administrative staff. In one state, the lack of sufficient capacity to handle new applications contributed to a lawsuit alleging excessive delays in eligibility determination.

While some Medicaid officials felt their experiences with the early expansions had helped them prepare somewhat for 2014, most voiced the opinion that the two primary challenges ahead for states are similar with or without an early expansion: coordinating with the new health insurance Marketplaces and converting their eligibility system over to the new Modified Adjusted Gross Income standards required under health reform. In terms of eligibility systems, one director said, "Everybody is trying to either do a new IT [information technology] build or fix their current IT system, so I think that is an issue either way"—whether or not a state has done an early expansion.

Overall, as one official explained, "The work we did to do the early expansion, I think did very little to prepare us for the January 1, 2014 expansion."

Lesson #6: The so-called 'Woodwork Effect' (this is when uninsured individuals who were previously eligible for Medicaid before the ACA "come out of the woodwork" and sign up for coverage) was not apparent in these early expansions, but it would be premature to rule it out even in states that choose not to expand.

The early expander states generally did not report any large spillover effects on Medicaid enrollment. Most state officials said they had not seen any evidence that the eligibility expansions had resulted in significant increases in enrollment among previously-eligible groups, and to the extent that there was any increase in enrollment in non-expansion populations, it appeared to be more related to the economy than a spillover from the expansion. Nevertheless, most officials predicted that the Affordable Care Act's individual mandate, media coverage, streamlined application process, and availability of Marketplace subsidies

will bring previously-eligible uninsured people into the program. In this often-voiced view, eligibility expansions are not the issue driving the woodwork effect; instead, it is these other factors that will occur in 2014, regardless of whether a state chooses to expand Medicaid to 133% of the federal poverty level.

This would indicate that states should plan for increased enrollment in Medicaid in 2014 even if they do not participate in the Medicaid expansion. While some of the factors driving the woodwork effect, including media coverage and outreach, may be weaker or absent in non-expansion states, there may still be increased costs for Medicaid programs from this phenomenon regardless of whether a state adopts the Medicaid expansion.

Lesson #7: Political context matters a great deal in implementing a Medicaid expansion.

Officials described the support for Medicaid expansion in these states among key stakeholders as nearly universal, though the intensity of that support varied. Doctors, hospitals, insurance companies, the business community, and patient advocates all generally supported the goals of coverage expansion and bringing additional federal dollars into the states. Hospitals, consumer advocates, and community health centers were most vocal and "extremely supportive;" doctors, insurers, and the business community were described as more "lukewarm." Many of the stakeholders played key roles in outreach and enrollment, such as Federally-Qualified Health Centers conducting what one official called "inreach"—enrolling the people already in some way engaged in the health care safety net.

But more generally, these states all have governors (five Democrats, one Republican) who have declared their support for the 2014 Medicaid expansion (Advisory-Board, 2012), and generally had what one Medicaid director called a very "pro-

coverage" culture. Furthermore, five of the six have declared their plans to create a state-based Marketplace, showing general support for the Affordable Care Act (The Henry J. Kaiser Family Foundation, 2013a). This culture in government among stakeholders, and public opinion, can—as one official stated—grease the wheels considerably and enable programs to overcome implementation challenges along the way more easily. In contrast, the official explained, "In a different setting where you have really deep philosophical divides, economic divides, so forth around some of these approaches, I think that the opportunities for the inevitable bumps in the road to blow up into bigger issues are much greater."

In the states in our study, problems including enrollment and cost underestimates, lawsuits, administrative delays, and other challenges were overcome without derailing the whole enterprise, and left most officials feeling that their expansions had been successful on the whole. Actively incorporating stakeholders at each step during the implementation process and keeping them apprised of impending changes or new challenges were described as critical ways to maintain support over time.

However, the Affordable Care Act will be implemented in a much more fractious environment in many states than those we studied here (Sommers & Epstein, 2013), only heightening the need for state officials to be well-prepared for the implementation challenges ahead. These challenges will require officials to expand administrative capacity, handle significant cost and enrollment uncertainty, and address remaining barriers to care over the coming years of immense change in the Medicaid program.

Correspondence

Benjamin Sommers, M.D., Ph.D., Harvard School of Public Health—Department of Health Policy &

Management, 677 Huntington Ave., Kresge 406, Boston, MA 02115, bsommers@hsph.harvard.edu, Tel. 617-432-3271, Fax. 617-432-4494.

Acknowledgments

We greatly appreciate the insights and information provided by state Medicaid officials in the six study states. We are also grateful to Stephen Somers and Carolyn Ingram for their valuable advice and assistance in contacting state officials, and Mary Alice Lee and Sharon Langer for their insights on Connecticut's expansion.

Disclosures

A synopsis of preliminary findings from this analysis appeared online in June 2013 at http://healthaffairs. org/blog/2013/06/14/lessons-from-early-medicaidexpansions-under-the-affordable-care-act/>. The present article should be considered the full and final version of this analysis. This work was supported by a research grant from the National Institute of Health Care Management Foundation (NIHCM) and grant number K02HS021291 from the Agency for Healthcare Research and Quality. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIHCM or the Agency for Healthcare Research and Quality. The authors have no financial conflicts of interest to report. Dr. Sommers currently serves part-time as an advisor in the Office of the Assistant Secretary for Planning and Evaluation, at the U.S. Department of Health and Human Services (HHS). This paper does not represent the views of HHS.

References

- Advisory-Board. (2012). Where each state stands on ACA's Medicaid Expansion. Washington, DC: Advisory Board Company.
- Associated Press. (2012, November 23). Increased Medicaid demand felt across Connecticut. *Modern Healthcare.com*.
- Baicker, K., Taubman, S., Allen, H., Bernstein, M., Gruber, J., Newhouse, J. P., . . . Group, O. H. S. (2013). The Oregon Experiment—Effects of

Medicaid on Clinical Outcomes. *The New England Journal of Medicine*, 368(18), 1713–1722. PubMed http://dx.doi.org/10.1056/NEJMsa1212321

- Beronio, K., Po, R., Skopec, L., & Glied, S. (2013).

 ASPE Issue Brief: Affordable Care Act expands mental health and substance use disorder benefits and federal parity protections for 62 million Americans. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation.
- Boyatzis, R. (1998). *Transforming Qualitative Information*. Thousand Oaks, CA: Sage Publishers.
- Buchmueller, T. C., Orzol, S., & Shore-Sheppard, L. D. (2013). The effect of Medicaid payment rates on access to dental care among children (NBER Working Paper, #19218).
- Buettgens, M., Garrett, B., & Holahan, J. (2010). America under the Affordable Care Act. Washington, D.C.: Urban Institute.
- Clemans-Cope, L., Kenney, G. M., Buettgens, M., Carroll, C., & Blavin, F. (2012). The Affordable Care Act's coverage expansions will reduce differences in uninsurance rates by race and ethnicity. [Research Support, Non-U.S. Gov't]. *Health Affairs*, *31*(5), 920–930. PubMed http://dx.doi.org/10.1377/hlthaff.2011.1086
- Cunningham, P. J. (2011, March). State variation in primary care physician supply: implications for health reform Medicaid expansions (Research Brief, No. 19). Washington, DC: Center for Studying Health System Change.
- DC Fiscal Policy Institute 2012. The District of Columbia's Healthcare Alliance. Washington, DC. Retrieved from http://www.dcfpi.org/wp-content/uploads/2009/03/4-27-12-Alliance-Brief-FINAL1.pdf

- Decker, S. L. (2012). In 2011 nearly one-third of physicians said they would not accept new Medicaid patients, but rising fees may help [Research Support, U.S. Gov't, P.H.S.]. *Health Affairs*, *31*(8), 1673–1679. PubMed http://dx.doi. org/10.1377/hlthaff.2012.0294
- Decker, S. L., Kostova, D., Kenney, G. M., & Long, S. K. (2013). Health status, risk factors, and medical conditions among persons enrolled in Medicaid vs uninsured low-income adults potentially eligible for Medicaid under the Affordable Care Act [Comparative Study]. *Journal of the American Medical Association*, 309(24), 2579–2586. PubMed http://dx.doi.org/10.1001/jama.2013.7106
- Eisenberg, J. M., & Power, E. J. (2000). Transforming insurance coverage into quality health care: voltage drops from potential to delivered quality. *Journal of the American Medical Association*, 284(16), 2100–2107. PubMed http://dx.doi.org/10.1001/jama.284.16.2100
- Elmendorf, D. W. (2010). [Letter to Honorable Nancy Pelosi]. Congressional Budget Office, Washington, DC.
- Elmendorf, D. W. (2012, July). Estimates for the Insurance Coverage Provisions of the Affordable Care Act Updated for the Recent Supreme Court Decision. Washington DC: Congressional Budget Office.
- Finkelstein, A., Taubman, S., Wright, B. J., Bernstein, M., Gruber, J., Newhouse, J. P., . . . Group, O. H. S. (2011). *The Oregon health insurance experiment: evidence from the first year* (NBER working paper 17190). Cambridge, MA: National Bureau of Economic Research.
- Harbage, P., & King, M. L. (2012). A Bridge to Reform: California's Medicaid Section 1115

- *Waiver.* Sacramento, CA: California HealthCare Foundation.
- Holahan, J., & Headen, I. (2010). Medicaid coverage and spending in health reform: national and state-by-state results for adults at or below 133% FPL. Menlo Park, CA: Kaiser Family Foundation.
- Kaiser Commission on Medicaid and the Uninsured. (2012d, June). *Medicaid Enrollment: June 2011 Data Snapshot*. Retrieved from http://kff.org/medicaid/issue-brief/medicaid-enrollment-june-2011-data-snapshot/
- Kaiser Commission on Medicaid and the Uninsured (2012c, February). *Medicaid managed care: key data, trends, and issues.* Retrieved from http://kff.org/medicaid/issue-brief/medicaid-and-managed-care-key-data-trends/
- The Henry J. Kaiser Family Foundation (2012a). States getting a jump start on health reform's Medicaid expansion. Washington DC: Kaiser Commission on Medicaid and the Uninsured.
- The Henry J. Kaiser Family Foundation (2012b). Where are states today? Medicaid and state-funded coverage eligibility levels for low-income adults. Washington, D.C.: The Henry J. Kaiser Family Foundation.
- The Henry J. Kaiser Family Foundation (2013a). State decisions for creating health insurance exchanges, as of April 1, 2013. Accessed August 27, 2013 from http://www.statehealthfacts.org/comparemaptable.jsp?ind=962&cat=17
- The Henry J. Kaiser Family Foundation. (2013b). Summary of the Affordable Care Act (Publication No. 8061-02). *Focus on Health Reform*, 1–13. Washington, DC: The Henry J. Kaiser Family Foundation.
- Kenney, G. M., Lynch, V., Haley, J., & Huntress, M. (2012). Variation in Medicaid eligibility

- and participation among adults: implications for the Affordable Care Act. *Inquiry*, 49, 231–253. PubMed http://dx.doi.org/10.5034/inquiryjrnl_49.03.08
- Levinson, D., Lakoma, M. D., Petukhova, M., Schoenbaum, M., Zaslavsky, A. M., Angermeyer, M., . . . Kessler, R. C. (2010). Associations of serious mental illness with earnings: results from the WHO World Mental Health surveys. *The British Journal of Psychiatry: The Journal of Mental Science*, 197(2), 114–121. PubMed http://dx.doi.org/10.1192/bjp.bp.109.073635
- Malloy, D. (2012, August 20). [Letter to Kathleen Sebellius]. Governor's Office, Hartford, CT. Retrieved from www.ct.gov/dss/lib/dss/pdfs/1115waiverapplication.pdf
- NVivo software (Version 9.0) (2010). Doncaster, Australia: International, Q. S. R.
- Sommers, B. D., Baicker, K., & Epstein, A. M. (2012). Mortality and Access to Care among Adults after State Medicaid Expansions. *The New England Journal of Medicine*. PubMed http://dx.doi.org/10.1056/NEJMsa1202099
- Sommers, B. D., & Epstein, A. M. (2010). Medicaid expansion--the soft underbelly of health care reform? *The New England Journal of Medicine*, 363(22), 2085–2087. PubMed http://dx.doi.org/10.1056/NEJMp1010866

- Sommers, B. D., & Epstein, A. M. (2013). U.S. governors and the Medicaid expansion--no quick resolution in sight. *The New England Journal of Medicine*, 368(6), 496–499. PubMed http://dx.doi.org/10.1056/NEJMp1215785
- Sommers, B. D., & Rosenbaum, S. (2011). Issues in health reform: how changes in eligibility may move millions back and forth between Medicaid and insurance exchanges. *Health Affairs*, 30(2), 228–236. PubMed http://dx.doi.org/10.1377/hlthaff.2010.1000
- Sommers, B. D., Swartz, K., & Epstein, A. (2011). Policy makers should prepare for major uncertainties in medicaid enrollment, costs, and needs for physicians under health reform. *Health Affairs*, 30(11), 2186–2193. http://dx.doi.org/10.1377/hlthaff.2011.0413 PubMed
- Sparer, M. (2012). Medicaid managed care: Costs, access, and quality of care. (Research Synthesis Report No. 23). Princeton, NJ: Robert Wood Johnson Foundation.
- Tavenner, M. (2013, March 1). [Letter to Roderick Bremby].Retrievedfromhttp://www1a.medicaid. gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ct/ct-medicaid-low-income-adults-coverage-ar.pdf
- Washington Health Care Authority (2012). History of Basic Health. Olympia, WA: Health Care Authority. Retrieved from http://www.basichealth.hca.wa.gov/about.html

Appendix A

Exhibit A1. List of Topics Covered in the Interview Guide

- 1. Enrollment progress to date
 - a. Enrollment compared to original projections
 - b. Percentage transferred from pre-existing programs, versus new enrollment
 - c. Spillover effects on enrollment in other categories of Medicaid
- 2. Outreach and enrollment procedures
 - a. Changes in application process, if any
 - b. Public relations effort to inform newly-eligible individuals, if any
 - c. Groups targeted for enrollment, if any
 - d. Major barriers to enrollment, if any
- 3. Role of Medicaid managed care, if any
 - a. Insurers' attitudes towards the expansion
 - b. Setting of capitation rates, and accuracy of those rates
 - c. Areas of higher-than-expected utilization, if any
- 4. Response from provider community
 - a. Views on the expansion from hospitals, physicians, and other clinicians
 - b. Current Medicaid participation rates among various providers
 - c. Current barriers to accessing care for Medicaid beneficiaries, if any
 - d. Expected impact of the 2013 Medicaid primary care payment increase
- 5. Impact of Medicaid coverage on new beneficiaries
 - a. Any changes in cost-sharing and covered benefits from pre-existing programs
 - b. Potential gains in access to care or health status
 - c. Changes in financial risk protection
- 6. Costs of the expansion
 - a. Per capita costs compared to original projections and compared to previous Medicaid eligibility groups
 - b. Particular service areas with high costs, if any
 - c. Administrative costs of the expansion, and changes over time
 - d. Any concerns in state about loss of federal funding in future
 - e. Any concerns in state about 'woodwork effect'
- 7. Major implementation challenges experienced thus far
 - a. Criticisms from opponents of expansion
 - b. Anything the state should have done differently in retrospect
 - c. Key lobbying or stakeholder support (including business community) for or against the expansion
- 8. Preparations for 2014 Medicaid expansion
 - a. Any work thus far with Marketplaces
 - b. Efforts for converting of income standard to Modified Adjust Gross Income
 - c. Any information technology investments made for 2014
- 9. Any other important lessons learned