Cost Sharing, Payment Enforcement, and Healthy Behavior Programs in Medicaid: Lessons from Pioneering States

Melinda B. Buntin, Ph.D.
Professor and Chair, Department of Health Policy
Vanderbilt University School of Medicine

John Graves, Ph.D.
Assistant Professor, Department of Health Policy
Vanderbilt University School of Medicine

Nikki Viverette, MSW Health Policy Analyst, Department of Health Policy Vanderbilt University School of Medicine

Introduction

Republicans' health reform proposals and anticipated regulatory guidance under the Trump administration aim to broaden state flexibility in the design and operation of Medicaid programs. Several of the proposed changes, including the ability to charge enrollees cost sharing, disenroll those who fall behind on payments, and reward enrollees who engage in certain healthy behaviors, build upon efforts currently underway in states that expanded their Medicaid programs with Section 1115 waivers.

Section 1115 waivers allow the Department of Health and Human Services to waive specific Medicaid provisions, and allow states to use federal Medicaid funds in ways that are not otherwise allowed under federal rules. 1115 waivers may enable broad changes in eligibility benefits, cost sharing, and provider payments or focus on specific services and populations.

There is currently little evidence on whether states that have implemented cost sharing, payment enforcement, and healthy behavior programs are achieving their goal of encouraging personal responsibility while reducing Medicaid program costs. The experience of states with 1115 waivers can therefore offer useful lessons on the design and effectiveness of these types of Medicaid reform.

"There is currently little evidence on whether states that have implemented cost sharing, payment enforcement, and healthy behavior programs are achieving their goal of encouraging personal responsibility while reducing Medicaid program costs."

The objective of this brief is to synthesize the available evidence on how cost sharing, payment enforcement, and healthy behavior programs in 1115 waivers have worked in several states, including Arkansas, Indiana, and Michigan. This brief includes a summary of these changes, available evidence from state waiver evaluations, and best practices for state and federal policymakers considering implementing similar programs.

Cost Sharing

Under current federal Medicaid rules, states have flexibility to impose copays on most enrollees with incomes between 100-150% of the federal poverty level (FPL). States can charge premiums and higher copays for enrollees with incomes above 150% FPL through a State Plan Amendment, but for enrollees below 150% FPL, states can only impose premiums with a waiver.¹

States may vary copays based on provider type (i.e. lower copays for primary care to encourage utilization), income level, and eligibility group.

Federal regulations limit the amounts states can charge Medicaid enrollees for cost sharing, which includes premiums, contributions to accounts, and copays, to "nominal" amounts (see chart in Appendix).

States must also ensure that the total cost of enrollee cost sharing does not exceed 5% of the enrollee's household income on a quarterly or monthly basis.²

"Research shows that cost sharing can decrease enrollment, decrease access to essential health care, and increase the use of more expensive forms of care such as the emergency department."

Opportunities

Proponents expect that enrollee cost sharing will offset some state costs and will increase enrollees' responsibility for their health coverage, reduce unnecessary utilization, and familiarize enrollees with private insurance models.³

Most 1115 waiver states have

expansion population. Most of these states charge Medicaid

copays at or below the federal

have waivers to charge higher copays for non-emergency use

of the Emergency Department.

maximums, but a few states

contributions and modest

copays for their Medicaid

adopted monthly

Challenges

Lower-income individuals are especially sensitive to cost sharing. Research shows that cost sharing can decrease enrollment,^{4,5} decrease access to essential health care,^{6,7} and increase the use of more expensive forms of care such as the emergency department (ED).^{8,9} Experience shows that states may also face increased administrative burden when implementing enrollee cost sharing. Finally, it is not clear to what extent enrollee cost sharing might affect total health care spending.¹⁰



Cost Sharing Affects Access to Coverage

Research indicates that instituting premiums or contributions reduces Medicaid participation and makes it harder for enrollees to access and maintain coverage. One study, looking at four states' experiences in the 1990s, found that participation rates dropped 15% when Medicaid premiums were set as low as 1% of an enrollee's household income. Premiums set at 3% reduced enrollment by as much as half.¹¹

In 2003, Oregon increased premiums for childless adults below 100% FPL from \$6 to \$20 per month, and imposed copays. The result was a 50% reduction in enrollment.¹² The enrollees most affected by the cost sharing increase were those with incomes below 10% FPL.¹³ For those who were disenrolled due to financial barriers, one-third remained uninsured two years later.¹⁴

Cost Sharing Affects Access to Care

Utah also increased premiums in their Medicaid program in 2003. Individuals who were disenrolled due to increased financial burden reported significant unmet health needs, particularly with dental care, mental health care, and substance use treatment.¹⁵

The RAND Health Insurance Experiment also demonstrated that when enrollees are given more financial responsibility for their care, they cut back on high-value, necessary care just as much as they cut back on low-value, non-essential services. ¹⁶ Cost sharing has been associated with reduced use of clinician visits, preventive services, medication adherence, and behavioral health services. ^{17,18}

"When enrollees are given more financial responsibility for their care, they cut back on high-value, necessary care like preventive screenings just as much as they cut back on low-value, non-essential services."

Cost Sharing May Lead to Increased Spending in the Long Run

Research has found that if cost sharing is not well targeted, it may lead to long-run increases in spending. For example, increased copays for medications have been associated with higher utilization of inpatient and ED services among patients with chronic illness.¹⁹

One study looked at this "offset effect," which occurs when cost sharing is increased and enrollees delay necessary care, increasing hospitalizations. The study found that copay increases were associated with decreases in physician visits and prescription drug use; however, a corresponding increase in hospitalizations offset the savings brought in by higher copays by 20%.²⁰ Another study found that the offset effect is most concentrated in those with chronic illness, especially those with hypertension, arthritis, diabetes, and affective disorders.²¹ This may indicate that there is little financial gain to the state from charging higher copays for enrollees with certain chronic conditions.

Cost Sharing May be Administratively Burdensome to the State

A significant consideration for implementing cost sharing is the expense to the state. There are high administrative costs associated with collecting cost sharing, so any new revenues will be offset by these costs.²² Further, state savings that do accrue from cost sharing may be due more so to declines in enrollment and service utilization than from increases in revenue.²³

Some states found that for every \$1.00 raised in cost sharing, they spent more in administrative expenses (\$2.77 in AZ²⁴ and \$1.39 in VA²⁵). Arizona's fiscal impact study showed that it would cost the state \$15.8 million to collect premiums and copays while bringing in only \$2.9 million in premiums and \$2.7 million in copays.²⁶

"There are high administrative costs associated with collecting enrollee cost sharing, so any new revenues will be offset by these costs."

Cost Sharing May Not Reduce Health Care Spending

Finally, it is not clear if cost sharing can reduce overall health care spending, especially since the distribution of health care spending is skewed, with about 5% of the population accounting for half of all spending.²⁷ These individuals often have chronic conditions, disabilities, and other high-cost medical needs that require ongoing treatment and care. Once these individuals begin care, subsequent decisions about treatment are largely unaffected by cost sharing. Growth in health care spending will likely not slow or decrease unless the cost of care for those with chronic conditions, disabilities, and other high-cost medical needs also slows.²⁸

Lessons from the States



Arkansas Works

Arkansas' original waiver did not impose copays on enrollees; however, a waiver amendment approved in 2014 implemented contributions and copays for all enrollees between 50-138% FPL. These contributions ranged from \$5-\$25 depending on the enrollee's income.²⁹

Because Medicaid has caps on how much enrollees can be charged quarterly, Arkansas had to track enrollees' health spending, income, and contributions. Tracking this information was administratively burdensome and costly for the state; as a result, Arkansas terminated contributions and copays for enrollees between 50-100% FPL in 2015.^{30,31} After Arkansas suspended this requirement, the state Medicaid agency projected that the administrative costs of the waiver program would be cut in half – from \$12 to \$6 million.³²

Arkansas Works enrollees above 100% FPL are now required to pay monthly premiums up to 2% of their household income and are subject to copays at the point-of-service. The state has said that only about 25% of these enrollees are current on their premiums.³³



Healthy Indiana Plan

In the Healthy Indiana Plan (HIP), enrollees below 100% FPL have the option to make monthly contributions, but enrollees above 100% FPL are required to do so. Enrollees who make contributions are placed in HIP Plus, a plan that provides enhanced benefits such as dental and vision. Enrollees below 100% FPL who do not make contributions are placed in the HIP Basic plan.³⁴

Enrollees pay contributions equal to 2% of their household income (enrollees under 5% FPL pay \$1.00/month).³⁵ Enrollees below 100% FPL who do not make contributions are responsible for copays. Enrollees above 100% FPL have no other copays besides for non-emergency use of the ED.³⁶

About 65% of HIP enrollees make monthly contributions, 81% of whom have incomes below 100% FPL.³⁷ The state reports that slightly over half of all enrollees have annual incomes below 5% FPL, which means they make the minimum contribution of \$1.00 per month.³⁸ This means a large number of HIP enrollees are being charged the minimal contribution amount. Therefore, HIP may not provide an accurate assessment of how enrollee contributions affect enrollment.

According to an HIP evaluation, 39% of enrollees below 100% FPL and 46% of enrollees above 100% FPL who made contributions reported that they sometimes, usually, or always worried about being able to afford contributions.³⁹

A survey of enrollees who were either placed in the Basic plan or were disenrolled from HIP due to not making an initial contribution cited unaffordability as the reason (42% of those below 100% FPL and 44% of those above 100% FPL).⁴⁰ Interestingly, 85% of enrollee survey respondents below 100% FPL and 86% of those above 100% FPL who make contributions reported they would pay more to remain enrolled in HIP.⁴¹

An HIP evaluation found that more than 46,000 individuals were found eligible for HIP but were not enrolled because they didn't make an initial contribution.⁴² In a survey of these individuals, 44% of respondents said they couldn't afford the monthly payment or were confused about the payment process. ⁴³ This may indicate that HIP's contribution requirement is burdensome and confusing and may be deterring a large number of eligible individuals from enrolling.

For those that do enroll and make contributions, an HIP evaluation found that these enrollees were twice as likely to obtain primary care (31% to 16%), have better drug adherence (84% to 67%), and rely less on the ED for treatment than enrollees who did not contribute.⁴⁴



Healthy Michigan Plan

In the Healthy Michigan Plan (HMP), enrollees above 100% FPL pay contributions that are no more than 2% of an enrollee's household income. Enrollees are not charged copays for the first six months of enrollment. After six months, an enrollee's copay amount is calculated based on the prior six months' utilization. These amounts are then re-calculated once a quarter.⁴⁵

Ninety-one percent (91%) of respondents to an HMP enrollee survey thought that the amount they pay for coverage was affordable and 75% said that they would rather pay something for coverage than not contribute. However, only about 30% of HMP enrollees who owed contributions and about 37% of enrollees who owed copays had paid them.⁴⁶

This may be because enrollees were confused about cost sharing. Nearly 50% of respondents did not know if contributions were charged monthly regardless of health care use and 56% didn't know if there was a limit on the amount they had to pay. ⁴⁷ Some enrollees also did not understand why they had to pay monthly contributions in advance of accessing health care. ⁴⁸ This may indicate the need for further enrollee education about what the contributions are and how they are determined, particularly if the misperception that contributions are based on utilization might deter enrollees from contributing or seeking care.

Payment Enforcement

States that have a waiver or State Plan Amendment that allows them to charge Medicaid enrollees premiums can disenroll beneficiaries who fail to pay, but must offer a 60-day grace period before terminating coverage.⁴⁹ Without a waiver, states cannot lock enrollees out of coverage for failure to pay premiums or contributions nor can they require repayment of outstanding payments in order to reenroll.⁵⁰ Enrollees who are considered medically needy cannot be disenrolled.⁵¹

Under current law, states may permit providers to refuse service to enrollees above 100% FPL for failure to pay cost sharing, unless they are part of an exempt group (see Appendix for list of exempt groups). Service cannot be denied for enrollees below 100% FPL.⁵²

payment enforcement
mechanisms in place to
encourage enrollees to pay cost
sharing, which may include
charging copays at the point-ofservice, service denial,
disenrollment, or lockout from
coverage. Until Indiana's waiver
was approved, CMS had rejected
all proposals to implement a
lockout period for enrollees above
100% FPL who didn't make
monthly contributions.

Most 1115 waiver states have

Opportunities

The goal of payment enforcement is to ensure enrollees engage with the cost of their health care. Without payment enforcement, states have little recourse if enrollees do not participate in cost sharing. As an example, in Indiana, which disenrolls beneficiaries for non-payment or moves them to a more-limited benefits plan (depending on income), 90% of enrollees who paid monthly contributions continued to do so;⁵³ in Michigan, which doesn't disenroll beneficiaries for non-payment, only about 30% of enrollees who owe monthly contributions have paid them.⁵⁴

Some states that do not disenroll beneficiaries for non-payment may instead charge enrollees copays at the point-of-service or consider past-due amounts as debt to the state. Most 1115 waiver states do not require repayment of past-due payments to continue coverage or to reenroll, so there is likely little financial gain from payment enforcement for states.

"There is likely little financial gain from payment enforcement for states."

"Payment enforcement may limit enrollees' access to coverage and care, may increase utilization of more expensive forms of care, and may also be unpopular with providers."

Challenges

Payment enforcement may limit enrollees' access to coverage and care, may increase utilization of more expensive forms of care, and may also be unpopular with providers as it increases the likelihood of uncompensated care.

Payment Enforcement May Restrict Access to Coverage and Care

Evidence is emerging that restricting or terminating coverage or access to services as a penalty for failing to pay cost sharing reduces access to necessary care, disrupts continuity of care, hinders management of chronic conditions, and increases the likelihood of ED utilization.⁵⁵

In 2003, Oregon introduced a six-month lockout period for enrollees who failed to pay premiums. Enrollees who lost coverage were three times as likely to lack a primary source of care, more likely to not fill a prescription, and four to five times more likely to use the ED as a source of care than people who remained enrolled.⁵⁶

Some Payment Enforcement Mechanisms May be Unpopular with Providers

Disenrollment and lockout mechanisms may also be unpopular with providers, as they increase the likelihood of providers not being paid for care delivered.⁵⁷ Individuals who are disenrolled from coverage generally reduce service utilization, but when they do seek care, providers may be on the hook for providing care for these individuals without reimbursement.



Lessons from the States



Arkansas Works

Arkansas Works does not disenroll beneficiaries for non-payment of monthly premiums. Enrollees above 100% FPL who do not pay premiums will incur a debt to the state, but the state cannot report the debt to credit agencies, refer the case to debt collectors, or seize a portion of the individual's earnings.⁵⁸



Healthy Indiana Plan

In the Healthy Indiana Plan (HIP), enrollees below 100% FPL have the option to make monthly contributions, but enrollees above 100% FPL (about 19% of HIP enrollees⁵⁹) are required to do so. Enrollees above 100% FPL who don't make contributions are disenrolled and locked out of coverage for six months.⁶⁰

According to an HIP enrollee survey, 85% of those with incomes above 100% FPL were aware that if they did not make contributions they could be disenrolled and locked out of coverage. However, only 67% of beneficiaries who were actually disenrolled from HIP Plus for non-payment said they were aware of this mechanism.⁶¹

In HIP's first two years, 5% of enrollees with incomes above 100% FPL were disenrolled and locked out of coverage. About 62% of beneficiaries who were disenrolled from HIP Plus for non-payment were enrolled in the program at least six months. Fourteen percent (14%) of Basic plan enrollees had been originally enrolled in HIP Plus but were moved when they missed a payment. About 60% of enrollees who transitioned to the Basic plan due to non-payment did so after six months of enrollment in HIP Plus.⁶²

For those moved or disenrolled due to non-payment, unaffordability was the most common reason cited (34% of those moved to the Basic plan and 44% of those disenrolled from HIP Plus). The next most common reason cited was confusion about the payment process.⁶³ This indicates that payment processes should be clear and simple for enrollees.

According to an HIP enrollee survey, individuals who were disenrolled for failure to pay contributions were less likely than HIP enrollees to make appointments for routine and specialty care and to fill a prescription. They were also far less likely to have insurance coverage: Only 47% of disenrolled individuals and 41% of individuals who were never enrolled due to non-payment reported they had coverage at the time of the survey.⁶⁴

Of all HIP enrollees, 55% missed a payment at some point. However, nearly 90% of those were enrollees below 100% FPL who never made a contribution and were therefore enrolled in HIP Basic. ⁶⁵ Enrollees below 100% FPL were more likely to miss a payment (57%) than those above 100% FPL (51%). This may demonstrate that cost sharing places a larger burden on individuals with lower incomes. ⁶⁶



Healthy Michigan Plan

Healthy Michigan Plan enrollees cannot lose coverage or be denied services for failure to pay contributions or copays. However, the state may attempt to collect unpaid contributions from enrollees. Some enrollees have had their state income tax refunds garnished. Still, only about 30% of enrollees who owe HMP contributions have paid them.⁶⁷

Healthy Behavior Programs

More Medicaid programs are encouraging enrollees to engage in healthy behaviors such as attending primary care appointments, completing a health assessment, filling prescriptions, maintaining a healthy diet, increasing physical activity, or quitting smoking.

Historically, efforts to promote healthy behaviors among Medicaid enrollees were implemented by managed care organizations (MCOs). Medicaid MCOs could provide incentives such as gift cards and coupons to enrollees for completing specific healthy behavior activities. However, Medicaid authority has evolved over time and states now generally use one of three authorities to implement healthy behavior programs: 1115 waivers, alternative benefit plans, and grant funding.⁶⁸

Some 1115 waiver states have used incentives for enrollees to engage in healthy behaviors. These incentives include reducing or eliminating cost sharing, rolling over Health Savings Account funds, offering enhanced benefits, or providing cash rewards.

The Affordable Care Act (ACA) also created new opportunities for states to implement such programs, and in 2011, the Centers for Medicare and Medicaid Services (CMS) awarded ten states grants to test Medicaid healthy behavior programs for individuals with chronic diseases.⁶⁹ Some of the outcomes of these programs are discussed in the sections below.

Opportunities

The goals of healthy behavior programs are to improve enrollee health and reduce health care costs. Since lower-income populations have higher rates of obesity, smoking, substance abuse, heart disease, diabetes, and stroke than the general population, encouraging healthy behaviors could be valuable.⁷⁰ Research has shown that financial rewards in Medicaid have been effective incentives for one-time or short-term activities, such as getting vaccinations, accessing preventive services, or attending follow-up appointments with providers.⁷¹

Challenges

There is little support showing that healthy behavior incentives are effective in changing behaviors that require maintenance, which often are the behaviors that influence health care costs the most. Further, enrollees are often not aware of healthy behavior incentives, which reduces any positive effects the incentives could have. Lower-income populations also face various environmental factors that make it especially difficult to comply with healthy behavior activities. Finally, healthy behavior programs are often administratively burdensome and costly for the state.

"There is little support showing that healthy behavior incentives are effective in changing behaviors that require maintenance, which are often the behaviors that influence healthcare costs the most."

Healthy Behavior Incentives are Not Effective at Changing Long-Term Behaviors that Most Influence Health and Health Costs

Research on Medicaid healthy behavior programs shows that incentives for changing long-term behaviors, such as a healthy diet, exercise, weight loss, or smoking cessation, are not effective. 72,73 These behaviors, which heavily influence health care costs and utilization, require long-term behavior changes that are difficult to affect with short-term incentives. 74 Incentives targeting more complex and long-term changes may help motivate initial positive behaviors, but these effects diminish over time. 75



Healthy Behavior Programs Often Have Low Rates of Enrollee Participation

Low rates of participation, often due to lack of understanding, can also influence the overall effectiveness of healthy behavior programs. Idaho's Medicaid program provided incentives for enrollees to consult with a doctor about losing weight or quitting smoking. Participants could earn a \$100 voucher to be used for gym memberships, weight management programs, nutrition counseling, or tobacco cessation products. However, after two years, less than 1% of enrollees had chosen to participate. West Virginia's Medicaid program provided access to an enhanced benefits package if enrollees agreed to engage in healthy behaviors, but only 10% of eligible adults enrolled in the enhanced plan.

lowa's Medicaid healthy behavior program waived premiums if participants completed specific healthy activities. Evaluation of the program's first year showed that healthy behavior completion rates were less than 17%. Interviews with enrollees and provider offices revealed low levels of awareness of the program, a lack of knowledge about how the program works, and barriers to completing activities. Evaluators went on to say that efforts to reform Medicaid by shifting responsibility to enrollees for healthy behaviors are unlikely to succeed, "especially without careful thought and design of premiums, penalties, and incentives for participants."⁷⁸

Lower-Income Populations Face Barriers to Completing Healthy Behavior Activities

Lower-income populations often face environmental factors such as lack of reliable transportation, access to low-cost and convenient food options, and space and opportunities to exercise. These factors, and others, can create barriers to completing healthy behavior activities and sustaining long-term behavior change, which may disadvantage much of the Medicaid population.

Healthy Behavior Programs May be Administratively Burdensome for States

The costs to design and implement healthy behavior programs may also be high for states. For example, Florida invested \$1.1 million during the first year of its healthy behavior program to set up administrative systems and hire outside vendors.⁷⁹ In Wisconsin, health plans that administered their healthy behavior

program noted that they did not accurately gauge the amount of staff time needed for implementation, requiring the state and health plans to allocate additional resources to the projects.⁸⁰

CMS is also evaluating Medicaid healthy behavior programs, with its final report due to Congress in April 2017. In a 2016 interim report, CMS noted that many states faced administrative challenges in setting up their programs and recruiting participants and providers.⁸¹

Recent Lessons from the States



Arkansas Works

Arkansas Works added a healthy behavior program to its waiver in an amendment that was approved in December 2016. Enrollees below 100% FPL who visit a primary care provider (PCP) each year, and enrollees above 100% who make three consecutive timely premium payments and visit a PCP, will be eligible to receive an incentive benefit.⁸² The state has not yet clarified what the incentive benefit might be.



Healthy Indiana Plan

Enrollees in HIP Basic can roll over funds, and HIP Plus enrollees can have their rollover funds doubled by the state, if they obtain preventive services outlined by the program. Only 5-15% of HIP enrollees participated in the healthy behavior program. However a much larger number of beneficiaries (87%) enrolled in HIP Plus for at least twelve months did obtain preventive services.⁸³

A slight majority of respondents to an HIP enrollee survey did indicate they understood they could roll over account funds if they obtained preventive services; however, more than half of respondents thought they would be charged for those services.⁸⁴



Healthy Michigan Plan

Healthy Michigan Plan (HMP) enrollees above 100% FPL are required to complete healthy behavior activities. Enrollees must attend an appointment with their primary care provider (PCP), complete a health risk assessment (HRA), and agree to address a healthy behavior. Healthy behaviors include targeting routine ED use for non-emergency treatment, multiple co-morbidities, substance use disorders, tobacco use, obesity, and immunizations. Participants below 100% FPL receive a \$50 gift card for completing healthy behavior activities and those above 100% FPL get a 50% reduction in contributions once they accumulate copays equal to 2% of income their income.⁸⁵

According to an HMP report, only 17% of beneficiaries enrolled in a health plan for at least six months completed an HRA.⁸⁶ However, of the enrollees who did complete an HRA, nearly all agreed to address a

healthy behavior, and 60% agreed to focus on more than one healthy behavior. The largest share of enrollees chose to address weight loss (66%), followed by chronic condition follow-up (43%), immunizations (40%), and tobacco cessation (37%).⁸⁷

Just over half of respondents to an HMP enrollee survey reported that they remembered completing the HRA, but most did not understand what the incentives were or the connection between the activity and the incentives. This highlights how crucial education on the purpose and connection between activities and incentives are for enrollees.

Interestingly, for the enrollees who remembered completing the HRA, nearly 40% agreed that information about the healthy behavior program encouraged them to do something they might not have done otherwise. 88 Enrollees also noted that the more immediate receipt of the gift card, as opposed to a future reduction in contribution amounts, was a greater incentive to complete the program requirements. 89 This aligns with other research on healthy behavior incentives.

Further Evaluation

Further evaluation of how these waiver elements are affecting enrollees and the state will be important to understanding if they are achieving their intended goals. This will be especially critical for the Healthy Indiana Plan (HIP), since it is the first waiver that allows enrollees to be locked out of coverage for non-payment.

HIP's interim evaluation was released July 2016 and includes information from the first year of implementation. Due to the length of time, better insight into HIP will be available in the program's second year report, due to CMS in April 2017, and their final evaluation, to be completed by March 2018.



Best Practices for Implementing Cost Sharing, Payment Enforcement, and Healthy Behavior Programs in Medicaid

States considering implementing cost sharing, payment enforcement, or healthy behavior programs should consider the effects on enrollees with the effects on administrative and overall health care costs. Each of these waiver elements can create burdens on enrollees, providers, and state administrative functions. However, for states interested in implementing these components, there are ways to alleviate some of the adverse effects. Some best practices for responsibly implementing cost sharing, payment enforcement, and healthy behavior programs are below.

Best Practices for Implementing Enrollee Cost Sharing

Target copays for services that may be overused.

 Research has found that if cost sharing is not well targeted, it may lead to long-run increases in spending.⁹⁰ This could be mitigated by selectively adjusting copays to align them with expected health benefits, such as eliminating copays on effective, low-cost drugs and for primary care visits.⁹¹



- Part of targeting cost sharing includes limiting who is responsible for it.
 Limiting cost sharing to enrollees above 100% FPL helps allay some of the negative effects of cost sharing for very low-income enrollees. Another option is to tier cost sharing so that enrollees with incomes below 100% FPL pay less than enrollees above 100% FPL.
- Targeting cost sharing so that it is within the bounds of Medicaid's approved limits (see Appendix for Medicaid cost sharing chart) may help limit some of the burden placed on enrollees.

Give new enrollees a "grace period" to access care before implementing cost sharing.

- Individuals gaining coverage through Medicaid expansion may have limited experience with health insurance. Giving enrollees an opportunity to use services, understand the value of coverage, and develop a relationship with a provider before being responsible for cost sharing may help reduce the negative effect on service use. 92
- Delaying the start of cost sharing can also provide states baseline service use data against which to measure the effect of cost sharing.⁹³

Keep the cost sharing program simple. A simpler program helps ensure that enrollees understand the program and that administrative costs associated with collecting cost sharing are minimized.

Ensure frequent and objective evaluation is part of the cost sharing program.

- CMS requires program evaluation as part of waivers. Additional evaluations from trusted sources such as universities or state research organizations may also be helpful.
- Collecting evidence on the effect of cost sharing on enrollees' access to care, amounts collected, and costs to administer the program should be a part of regular evaluations.

Best Practices for Implementing Payment Enforcement

Communicate expectations about monthly contributions and cost sharing upfront. This helps ensure that enrollees understand the penalties involved with non-payment of premiums, contributions, and copays.

Ensure that penalties don't disrupt ongoing episodes of care or limit enrollees' ability to work, attend school, or care for dependents.

- States have found that disenrollment and lockout reduce access to care, increase uncompensated care, and may cost more in the long-run.⁹⁴ This disruption in care may be especially problematic for those with chronic conditions or behavioral health needs.
- Instead of disenrolling or locking enrollees out of coverage, some states have chosen to charge copays at the point-of-service for enrollees who fail to pay monthly contributions, or bill enrollees for copays if they are unable to pay at the point-of-service.⁹⁵
- If states do disenroll beneficiaries, they should be given an opportunity to maintain coverage through an in-person hearing or a "good cause" waiver. States should also make it easy for beneficiaries to reenroll.
- Several states classify unpaid cost sharing as a "debt to the state," but states should be cautious of what that may mean for driver's licenses and receipt of benefits from other state programs. 96

View enforcement as an opportunity to communicate with enrollees.

- It may be important to understand why enrollees missed premium or contribution payments in order to improve program design.
- This kind of communication could be completed through the mail, phone call, text, or email. Communications should be simple, at an appropriate reading level, and in the enrollee's preferred language.

Keep payment enforcement simple.

- A simpler program helps ensure that enrollees understand payment enforcement and that administrative costs associated with enforcement and communication are minimized.
- States should consider alternate or supplemental approaches to payment enforcement. Research has shown that Medicaid enrollees generally use appropriate services if those services are accessible. With states' limited Medicaid resources, they may want to consider strategies to improve access to health services, better coordinate care, and better integrate health and social services, rather than implementing penalties that can be challenging for enrollees and costly to administer. 97

Ensure frequent and objective evaluation is part of the payment enforcement program. Collecting evidence on the effect of payment enforcement on enrollees' access to care and costs to administer the program should be a part of regular evaluations.

Best Practices for Implementing Healthy Behavior Programs

Ensure enrollees are aware of incentives.

Many healthy behavior programs have enrolled fewer participants than
anticipated because enrollees were not aware of the program, or didn't
understand the benefits or requirements.⁹⁸ Communications about the
program's benefits will help enrollees understand the program's rewards and
its potential to improve health.



- Communications should be frequent at enrollment, and at least monthly
 afterwards until the healthy behavior activity has been completed.⁹⁹
 Information provided through mailers and trusted health care workers (providers, case managers,
 pharmacists) are most helpful.¹⁰⁰
- Written materials should be simple, at an appropriate reading level, and in the enrollee's preferred language. Clear and consistent definitions for healthy behavior incentives and activities, and other key words, should be included at the end of account statements.
- Non-English speakers, individuals with lower educational completion, and individuals with poorer health status are less likely to engage in healthy behavior programs, so outreach and education to these individuals will be especially important.¹⁰¹
- It may be possible to increase enrollee comprehension and participation by letting them choose the healthy behavior with which they will engage. 102 It may also be possible to increase participation by offering other incentives, such as transportation, child care, cell phones, vouchers for healthy food, exercise equipment, tobacco cessation supplies, gym membership, and pedometers. 103,104

Create positive incentives for one-time or short-term healthy activities.

- Make activities the goal, rather than outcomes. Outcome targets can be punitive and actually make it harder for people with health risks to get the care they need to address those problems. 105
- States should choose healthy behavior activities based on evidence-based data that shows a solid connection between that activity and improved patient health.¹⁰⁶

Make incentives worth it.

- Distributing incentives immediately or soon after completion of an activity is most effective in improving outcomes and encouraging enrollees to complete another healthy behavior activity.¹⁰⁷
- Research on healthy behavior programs indicates that individuals prefer to receive cash over other types of rewards.¹⁰⁸ However, concerns that funds could be used for unhealthy items have made some programs reluctant to use cash. Some states instead use refillable debit cards for rewards, which have a comparable incentive level as cash.¹⁰⁹
- While research has found a relationship between the magnitude of an incentive and the likelihood of behavior change, there is currently insufficient evidence available to determine the best incentive value for lower-income populations. 110 Incentives of small amounts may lead people to focus on the trade-off between the difficulty of the behavior and the amount of the reward. However, amounts as low as \$5 or \$10 have been shown to be effective in incentivizing healthy behaviors. 111

Make the healthy behavior program simple.

- Programs with multiple requirements or goals can be confusing for enrollees, making it harder for them to participate and comply. 112 Complicated programs also add to state administrative costs.
- States should consider alternate or supplemental approaches. For example, improving access to care through coordination and transportation may improve enrollees' health and offer states more value than incentives alone. 113
- Put minimal responsibility on providers to record or certify health behaviors. A program that heavily relies on provider participation is less likely to succeed, given providers' limited time. 114

Ensure frequent and objective evaluation is part of the healthy behavior program.

- Data are needed to evaluate a program's effectiveness. States may want to consider offering the program initially to a sub-set of enrollees, and then compare the results to a similar control group.¹¹⁵
- Collecting evidence on the effect of healthy behavior programs on enrollees' access to care and costs to administer the program should be a part of regular evaluations.



Appendix

Maximum Allowable Premiums and Cost Sharing For Traditional Medicaid 116.117.118.119

Income Level	Below 100% FPL	101-150% FPL	Over 150% FPL
Premiums	Not allowed	Not allowed	Allowed
Copays			
Outpatient services	\$4	10% of state cost	20% of state cost
Inpatient services	\$75/admission	10% of state cost	20% of state cost
Preferred drugs	\$4	\$4	\$4
Non-preferred drugs	\$8	\$8	20% of state cost
Non-emergency use of ED	\$8	\$8	No limit (subject to aggregate cap)

Aggregate Cap on Premiums and Copays

5% of household income. Applied on a monthly or quarterly basis.

Eligibility Groups Exempt from Premiums and Copays

Most children under age 18

Most pregnant women with incomes <150% FPL

Individuals receiving hospice care

Individuals in institutions

American Indians who have ever received service from an Indian health care provider

Women covered under the Breast and Cervical Cancer program

Services Exempt from Copays

Emergency services

Family planning services and supplies

Preventive services

Pregnancy-related services

This document was made possible with funding from the California Health Care Foundation

- ¹ "Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.
- ² "Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.
- ³ "Premiums and Cost-Sharing in Medicaid," The Henry J. Kaiser Family Foundation, February 2013 at https://kaiserfamilyfoundation.files.wordpress.com/2013/02/8416.pdf.
- ⁴ Leighton Ku and Teresa Coughlin, "Sliding-Scale Premium Health Insurance Programs: Four States' Experiences," Inquiry 36, No. 4 (1999/2000): 471-490, https://www.jstor.org/stable/pdf/29772862.pdf.
- ⁵ "Research Brief: Changes in Enrollment of OHP Standard Clients," Oregon Health Research & Evaluation Collaborative, January 2004, 2017, http://www.statecoverage.org/files/Research%20Brief%20-%20Changes%20in%20Enrollment%20of%20OHP%20Standard%20Clients.pdf.
- ⁶ Utah Primary Care Network Disenrollment Report, Utah Department of Health Center for Health Data, Office of Health Care Statistics, August 2004, cited in "Premiums and Cost-Sharing in Medicaid: A Review of Research Findings," The Henry J. Kaiser Family Foundation, February 2013 at https://kaiserfamilyfoundation.files.wordpress.com/2013/02/8417-premiums-and-cost-sharing-in-medicaid.pdf.
- ⁷ Robert Brook et al., "The Health Insurance Experiment: A Classic RAND Study Speaks to the Current Health Care Reform Debate," RAND Corporation, 2006, http://www.rand.org/pubs/research_briefs/RB9174.html.
- ⁸ Dana Goldman, Geoffrey Joyce, and Yuhui Zheng, "Prescription Drug Cost Sharing: Associations with Medication and Medical Utilization and Spending and Health, JAMA, (2007): 298:61-69, http://vbidcenter.org/wp-content/uploads/2014/11/Prescription-Drug-Cost-Sharing-Associations-With-Medication-and-Medical-Utilization-and-Spending-and-Health_JAMA_JUL_2007.pdf.
- ⁹ Robert Lowe, "Impact of Medicaid Cutbacks on Emergency Department Use: The Oregon Experience," *Annals of Emergency Medicine* 52, No.6 (2008): 626-534, doi: 10.1016/j.annermergmed.2008.01.335, http://www.sciencedirect.com/science/article/pii/S0196064408004265.
- ¹⁰ Katherine Swartz, "Cost-Sharing: Effects on Spending," Research Synthesis Report No. 20, December 2010,
- Robert Wood Johnson Foundation, http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2010/rwjf402103/subassets/rwjf402103_1.
- ¹¹ Leighton Ku and Teresa Coughlin, "Sliding-Scale Premium Health Insurance Programs: Four States' Experiences," Inquiry 36, No. 4 (1999/2000): 471-490, https://www.jstor.org/stable/pdf/29772862.pdf.
- ¹² "Research Brief: Changes in Enrollment of OHP Standard Clients," Oregon Health Research & Evaluation Collaborative, January 2004, http://www.statecoverage.org/files/Research%20Brief%20-%20Changes%20in%20Enrollment%20of%20OHP%20Standard%20Clients.pdf.
- ¹³ Matthew Carlson and Bill Wright, "The Impact of Program Changes on Enrollment, Access, and Utilization in the Oregon Health Plan Standard Population," Office for Oregon Health Policy and Research, March 2005,

http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1012&context=soc_fac.

- ¹⁴ Matthew Carlson and Bill Wright, "The Impact of Program Changes on Enrollment, Access, and Utilization in the Oregon Health Plan Standard Population," Office for Oregon Health Policy and Research, March 2005, http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1012&context=soc_fac.
- ¹⁵ "Utah Primary Care Network Disenrollment Report," Utah Department of Health Center for Health Data, Office of Health Care Statistics, August 2004.
- ¹⁶ Robert Brook et al., "The Health Insurance Experiment: A Classic RAND Study Speaks to the Current Health Care Reform Debate," RAND Corporation, 2006, http://www.rand.org/pubs/research_briefs/RB9174.html.
- ¹⁷ Bisakha Sen et al., "Did Copayment Changes Reduce Health-Service Utilization Among Chip Enrollees? Evidence From Alabama." Health Services Research, No.47 (2012): 1603-1620, PMID: 22352979, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3401401/.
- ¹⁸ Gregory Simon et al., "Impact of Visit Copayments on Outpatient Mental Health Utilization by Members of a Health Maintenance Organization," *American Journal of Psychiatry* 153, No. 3 (1996): 331-338, https://www.ncbi.nlm.nih.gov/pubmed/8610819.
- ¹⁹ Dana Goldman, Geoffrey Joyce, and Yuhui Zheng, "Prescription Drug Cost Sharing: Associations with Medication and Medical Utilization and Spending and Health, *JAMA*, (2007): 298:61-69, http://vbidcenter.org/wp-content/uploads/2014/11/Prescription-Drug-Cost-Sharing-Associations-With-Medication-and-Medical-Utilization-and-Spending-and-Health_JAMA_JUL_2007.pdf.
- ²⁰ Amitabh Chandra, Jonathan Gruber, and Robin McKnight, "Patient Cost-Sharing and Hospitalization Offsets in the Elderly," *American Economic Review* 100, No. 1 (2010): 193-213, doi: 10.1257/aer.100.1.193, http://economics.mit.edu/files/6413.
- ²¹ Amitabh Chandra, Jonathan Gruber, and Robin McKnight, "Patient Cost-Sharing, Hospitalization Offsets, and the Design of Optimal Health Insurance for the Elderly," National Bureau of Economic Research, 2007, http://www.nber.org/papers/w12972.pdf.
- ²² "Premiums and Cost-Sharing in Medicaid: A Review of Research Findings," The Henry J. Kaiser Family Foundation, February 2013, https://kaiserfamilyfoundation.files.wordpress.com/2013/02/8417-premiums-and-cost-sharing-in-medicaid.pdf.
- ²³ "Premiums and Cost-Sharing in Medicaid: A Review of Research Findings," The Henry J. Kaiser Family Foundation, February 2013, https://kaiserfamilyfoundation.files.wordpress.com/2013/02/8417-premiums-and-cost-sharing-in-medicaid.pdf.
- ²⁴ Janet Napolitano and Anthony Rodgers, "Fiscal Impact of Implementing Cost Sharing and Benchmark Benefit Provisions of the Federal Deficit Reduction Act of 2005," December 13, 2006,

 $\underline{http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.482.6057\&rep=rep1\&type=pdf.}$

- ²⁵ Virgil Dickson, "Medicaid Cost-Sharing Seen as Deterring Enrollment," *Crain's Detroit Business*, September 22, 2014, http://www.crainsdetroit.com/article/20140922/NEWS01/140929978/medicaid-cost-sharing-seen-as-deterring-enrollment.
- ²⁶ "Fiscal Impact of Implementing Cost Sharing and Benchmark Benefit Provisions of the Federal Deficit Reduction Act of 2005," Arizona Health Care Cost Containment System, December 13, 2006, cited in "States Can Improve Health Outcomes and Lower Costs in Medicaid

Using Existing Flexibility," Center on Budget and Policy Priorities, April 9, 2015, http://www.cbpp.org/research/health/states-can-improve-health-outcomes-and-lower-costs-in-medicaid-using-existing# ftn15.

- ²⁷ Leslie Conwell and Joel Cohen, "Characteristics of Persons with High Medical Expenditures in the U.S. Civilian Noninstitutionalized Population, 2002," Medical Expenditure Panel Survey Statistical Brief # 73, March 2005, www.meps.ahrq.gov/mepsweb/data_les/publications.st73/stat73.pdf.
- ²⁸ Katherine Swartz, "Cost-Sharing: Effects on Spending," Research Synthesis Report No. 20, December 2010,
- Robert Wood Johnson Foundation, http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2010/rwjf402103/subassets/rwjf402103_1.
- ²⁹ Jane Wishner et al., "Medicaid Expansion, the Private Option, and Personal Responsibility Requirements: The Use of Section 1115 Waivers to Implement Medicaid Expansion Under the ACA," Urban Institute and Robert Wood Johnson Foundation, May 2015, http://www.urban.org/sites/default/files/publication/53236/2000235-Medicaid-Expansion-The-Private-Option-and-Personal-Responsibility-Requirements.pdf.
- ³⁰ Virgil Dickson, "Arkansas Cancels Cost-Sharing for Poorest in Medicaid Expansion," Modern Healthcare, June 8, 2015,
- http://www.modernhealthcare.com/article/20150608/NEWS/150609910/arkansas-cancels-cost-sharing-for-poorest-in-medicaid-expansion.
- ³¹ Melissa Burroughs, "The High Administrative Costs of Common Medicaid Expansion Waiver Elements," Families USA, October 20, 2015, http://familiesusa.org/blog/2015/10/high-administrative-costs-common-medicaid-expansion-waiver-elements.
- ³² Andy Davis, "Bill Asks Pause to Care Changes," *Arkansas Democrat-Gazette*, January 24, 2015, http://www.pressreader.com/usa/arkansas-democrat-gazette/20150124/281865821871822.
- ³³ Andy Davis," 4-Year Savings Put at \$66M if State Cuts Medicaid Rolls," *Arkansas Democrat-Gazette*, April 27, 2017, http://www.arkansasonline.com/news/2017/apr/27/4-year-savings-put-at-66m-if-state-cuts/
- ³⁴ "Healthy Indiana Plan (HIP) 2.0," Centers for Medicare and Medicaid, May 2015, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-ca.pdf.
- ³⁵ "Healthy Indiana Plan (HIP) 2.0," Centers for Medicare and Medicaid, May 2015, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-ca.pdf.
- ³⁶ "Health Indiana Plan (HIP) Section 1115 Waiver Extension Application," Indiana Family and Social Services Administration, December 20, 2016, https://www.in.gov/fssa/hip/files/HIP_Extension_Waiver.pdf.
- ³⁷ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- ³⁸ Judith Solomon, "Indiana Medicaid Waiver Evaluation Shows Why Kentucky's Medicaid Proposal Shouldn't Be Approved," Center on Budget and Policy Priorities, August 1, 2016, http://www.cbpp.org/research/health/indiana-medicaid-waiver-evaluation-shows-why-kentuckys-medicaid-proposal-shouldnt-be#_ftn14.
- ³⁹ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\label{lem:https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- ⁴⁰ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- 41 "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\label{lem:https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- ⁴² "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- ⁴³ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\frac{https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-Indiana-Plan-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- ⁴⁴ "Healthy Indiana Plan 2.0: Interim Evaluation Report," The Lewin Group, Inc., July 6, 2016,
- https://www.in.gov/fssa/files/Lewin_IN%20HIP%202%200%20Interim%20Evaluation%20Report_FINAL.pdf.
- ⁴⁵ "Healthy Michigan Section 1115 Demonstration," Centers for Medicare and Medicaid Services, 2016, https://www.medicaid.gov/Medicaid-cHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/mi-healthy-michigan-ca.pdf.
- ⁴⁶ "Michigan Adult Coverage Demonstration, Section 1115 Quarterly Report, 01/01/16-12/31/16," State of Michigan Department of Health and Human Services, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annl-rpt-2016.pdf.
- ⁴⁷ Susan Dorr Goold et al., "Healthy Michigan Voices Beneficiary Survey Interim Report," University of Michigan Institute for Healthcare Policy & Innovation, September 15, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-
- Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-benef-survey-interim-report-09212016.pdf.

- ⁴⁸ "Michigan Adult Coverage Demonstration Section 1115 Annual Report, Demonstration Year: 6 (01/01/2015-12/31/2015)," State of Michigan Department of Health and Human Services, May 17, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annual-report-DY6.pdf.
- ⁴⁹ "Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.
- ⁵⁰ Tricia Brooks et al., "Medicaid and CHIP Eligibility, Enrollment, Renewal, and Cost Sharing Policies as of January 2017: Findings from a 50-State Survey," The Henry J. Kaiser Family Foundation, January 12, 2017, http://kff.org/report-section/medicaid-and-chip-eligibility-enrollment-renewal-and-cost-sharing/.
- ⁵¹ "Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.
- ⁵² "Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.
- ⁵³ "Healthy Indiana Plan (HIP) Section 1115 Waiver Extension Application," Indiana Family and Social Services Administration, January 31, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/in-healthy-indiana-plan-support-20-pa4.pdf.
- ⁵⁴ "Michigan Adult Coverage Demonstration, Section 1115 Quarterly Report, 01/01/16-12/31/16," State of Michigan Department of Health and Human Services, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annl-rpt-2016.pdf.
- ⁵⁵ Hannah Katch and Judith Solomon, "Are Medicaid Incentives an Effective Way to Improve Health Outcomes?" Center on Budget and Policy Priorities, January 24, 2017, http://www.cbpp.org/research/health/are-medicaid-incentives-an-effective-way-to-improve-health-outcomes.
- ⁵⁶ Matthew Carlson and Bill Wright, "The Impact of Program Changes on Health Care for the Oregon Health Plan Standard Population: Early Results from a Prospective Cohort Study," Office of Oregon Health Policy and Research, March 2004, http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1013&context=soc_fac.
- ⁵⁷ David Ramsey, "The Medicaid Lockout: Gov. Asa Hutchinson's Proposal to Bar Beneficiaries from Coverage for Six Months if They Miss Premium Payments," *Arkansas Times*, December 14, 2015, http://www.arktimes.com/ArkansasBlog/archives/2015/12/14/the-medicaid-lockout-gov-asa-hutchinsons-proposal-to-bar-beneficiaries-from-coverage-for-six-months-if-they-miss-premium-payments.
- ⁵⁸ "Arkansas Works Section 1115 Demonstration," Centers for Medicare and Medicaid, December 8, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ar/ar-works-ca.pdf.
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Lopics/Waivers/1115/downloads/ar/ar-works-ca
 "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- ⁶⁰ "Healthy Indiana Plan (HIP) 2.0," Centers for Medicare and Medicaid, May 2015, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-ca.pdf.
- ⁶¹ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\label{lem:https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- 62 "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\frac{https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-Indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- ⁶³ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- $\label{lem:https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.$
- ⁶⁴ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- ⁶⁵ "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- 66 "Healthy Indiana Plan 2.0: POWER Account Contribution Assessment," The Lewin Group, March 31, 2017,
- https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.
- ⁶⁷ "Michigan Adult Coverage Demonstration, Section 1115 Quarterly Report, 01/01/16-12/31/16," State of Michigan Department of Health and Human Services, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annl-rpt-2016.pdf.
- ⁶⁸ "The Use of Healthy Behavior Incentives in Medicaid," *MACPAC*, August 2016, https://www.macpac.gov/wp-content/uploads/2016/08/The-Use-of-Healthy-Behavior-Incentives-in-Medicaid.pdf.
- ⁶⁹ Maia Crawford and Matt Onstott, "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives Opportunities-for-Medicaid 1.pdf.

- ⁷⁰ Steven Woolf et al., "How Are Income and Wealth Linked to Health and Longevity?" Urban Institute, April 2015, http://www.urban.org/sites/default/files/publication/49116/2000178-How-are-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf.
- ⁷¹ Robert Kane et al., "A Structured Review of the Effect of Economic Incentives on Consumers' Preventive Behavior," *American Journal of Preventive Medicine* 27, No. 4 (2004): 327-352, http://www.sciencedirect.com/science/article/pii/S0749379704001783.
- ⁷² Virginia Paul-Ebhohimhen and Alison Avenell, "Systematic Review of the Use of Financial Incentives in Treatment for Obesity and Overweight," *Obesity Review* 9, No. 4 (2007): pp. 355-367, http://aura.abdn.ac.uk/bitstream/handle/2164/286/Paul-ebhohimhen%202008.pdf;jsessionid=B328F5DF38E2E48D83145C931507F92A?sequence=1.
- ⁷³ Pat Redmond, Judith Solomon, and Mark Lin, "Can Incentives for Healthy Behavior Improve Health and Hold Down Medicaid costs?" Center on Budget and Policy Priorities, June 1, 2007, http://www.cbpp.org/research/can-incentives-for-healthy-behavior-improve-health-and-hold-down-medicaid-costs.
- ⁷⁴ Pat Redmond, Judith Solomon, and Mark Lin, "Can Incentives for Healthy Behavior Improve Health and Hold Down Medicaid costs?" Center on Budget and Policy Priorities, June 1, 2007, http://www.cbpp.org/research/can-incentives-for-healthy-behavior-improve-health-and-hold-down-medicaid-costs.
- ⁷⁵ Maia Crawford and Matt Onstott, "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives Opportunities-for-Medicaid 1.pdf.
- ⁷⁶ "Facts, Figures, Trends, 2008–2009," Idaho Department of Health and Welfare, http://healthandwelfare.idaho.gov/Portals/0/AboutUs/Publications/FFT_2008-2009.pdf.
- ⁷⁷ West Virginia Department of Health and Human Resources, Mountain Health Choices, cited in "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives_Opportunities-for-Medicaid_1.pdf.
- ⁷⁸ Natoshia Askelson et al., "Iowa's Medicaid Expansion Promoted Healthy Behaviors But Was Challenging To Implement And Attracted Few Participants," *Health Affairs* 36, No. 5 (2017): 799-807, doi:10.1377/hlthaff.2017.0048, https://content.healthaffairs.org/content/36/5/799.full.
- ⁷⁹ Joan Alker and Jack Hoadley, "The Enhanced Benefits Rewards Program: Is It Changing the Way Medicaid Beneficiaries Approach Their Health?," Georgetown University Health Policy Institute, July 2008, http://ihcrp.georgetown.edu/floridamedicaid/pdfs/briefing6.pdf.
- ⁸⁰ "Do Incentives Work for Medicaid Members? A Study of Six Pilot Projects," Wisconsin Department of Health Services, May 2013, https://www.dhs.wisconsin.gov/publications/p0/p00499.pdf.
- 81 "Second Report to Congress: Medicaid Incentives for Prevention of Chronic Diseases," U.S. Department of Health and Human Services, June 2016, https://innovation.cms.gov/Files/reports/mipcd-secondrtc.pdf.
- ⁸² "Arkansas Works Section 1115 Demonstration," Centers for Medicare and Medicaid, December 8, 2016,
- $\underline{\text{https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ar/ar-works-ca.pdf}.$
- ⁸³ "Healthy Indiana Plan Section 1115 Waiver Extension Application," Indiana Family and Social Services Administration, January 31, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/in-healthy-indiana-plan-support-20-pa4.pdf.
- ⁸⁴ "Healthy Indiana Plan 2.0: Interim Evaluation Report," The Lewin Group, Inc., July 6, 2016,
- https://www.in.gov/fssa/files/Lewin_IN%20HIP%202%200%20Interim%20Evaluation%20Report_FINAL.pdf.
- ⁸⁵ "Healthy Michigan Section 1115 Demonstration," Centers for Medicare and Medicaid Services, 2016, https://www.medicaid.gov/Medicaid-cut/4 CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/mi-healthy-michigan-ca.pdf.
- ⁸⁶ "Michigan Adult Coverage Demonstration, Section 1115 Quarterly Report, 01/01/16-12/31/16," State of Michigan Department of Health and Human Services, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annl-rpt-2016.pdf.
- ⁸⁷ "Michigan Adult Coverage Demonstration, Section 1115 Quarterly Report, 01/01/16-12/31/16," State of Michigan Department of Health and Human Services, 2017, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-annl-rpt-2016.pdf.
- ⁸⁸ Susan Dorr Goold et al., "Healthy Michigan Voices Beneficiary Survey Interim Report," University of Michigan Institute for Healthcare Policy & Innovation, September 15, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-
- Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-benef-survey-interim-report-09212016.pdf.
- ⁸⁹ Susan Dorr Goold et al., "Healthy Michigan Voices Beneficiary Survey Interim Report," University of Michigan Institute for Healthcare Policy & Innovation, September 15, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-
- Topics/Waivers/1115/downloads/mi/Healthy-Michigan/mi-healthy-michigan-benef-survey-interim-report-09212016.pdf.
- ⁹⁰ Elise Gould, "Increased Health Care Cost Sharing Works as Intended: It Burdens Patients Who Need Care the Most," Economic Policy Institute, May 8, 2013, http://www.epi.org/publication/bp358-increased-health-care-cost-sharing-works/.
- ⁹¹ Brendan Saloner, Lindsay Sabik, and Benjamin Sommers, "Pinching the Poor? Medicaid Cost Sharing under the ACA," New England Journal of Medicine 370, No. 13 (2014): 1177-1180, doi: 10.1056/NEJMp1316370, http://www.nejm.org/doi/full/10.1056/NEJMp1316370#t=article.
- ⁹² Medicaid Expansion Waivers in the States: Cost Sharing," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/cost-sharing.
- ⁹³ Medicaid Expansion Waivers in the States: Cost Sharing," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/cost-sharing.

- ⁹⁴ Hannah Katch and Judith Solomon, "Are Medicaid Incentives an Effective Way to Improve Health Outcomes?" Center on Budget and Policy Priorities, January 24, 2017, http://www.cbpp.org/research/health/are-medicaid-incentives-an-effective-way-to-improve-health-outcomes.
- ⁹⁵ MaryBeth Musumeci, Robin Rudowitz, Petry Ubri, and Elizabeth Hinton, "An Early Look at Medicaid Expansion Waiver Implementation in Michigan and Indiana," The Henry J. Kaiser Family Foundation, January 2017, http://files.kff.org/attachment/Issue-Brief-An-Early-Look-at-Medicaid-Expansion-Waiver-Implementation-in-Michigan-and-Indiana.
- ⁹⁶ Medicaid Expansion Waivers in the States: Cost Sharing," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/cost-sharing.
- ⁹⁷ Hannah Katch and Judith Solomon, "Are Medicaid Incentives an Effective Way to Improve Health Outcomes?" Center on Budget and Policy Priorities, January 24, 2017, http://www.cbpp.org/research/health/are-medicaid-incentives-an-effective-way-to-improve-health-outcomes.
- ⁹⁸ Hannah Katch and Judith Solomon, "Are Medicaid Incentives an Effective Way to Improve Health Outcomes?" Center on Budget and Policy Priorities, January 24, 2017, http://www.cbpp.org/research/health/are-medicaid-incentives-an-effective-way-to-improve-health-outcomes.
- ⁹⁹ Medicaid Expansion Waivers in the States: Wellness Programs," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/wellness-programs.
- ¹⁰⁰ T. Gurley-Calvez et al., "Mountain Health Choices Beneficiary Report," Bureau of Business and Economic Research, West Virginia University (2009), cited in "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives_Opportunities-for-Medicaid_1.pdf.
- ¹⁰¹ Allyson Hall et al., "Incentives for Healthy Behaviors: Experience from Florida Medicaid's Enhanced Benefit Rewards Program," *Journal of Primary Care & Community Health* 4, no. 2 (2013): 112-118,
- https://www.researchgate.net/publication/242015726_Incentives_for_Healthy_Behaviors_Experience_From_Florida_Medicaid%27s_Enhanced_Benefit_Rewards_Program.
- ¹⁰² Karen Blumenthal et al., "Medicaid Incentive Programs To Encourage Healthy Behavior Show Mixed Results To Date and Should Be Studied and Improved," *Health Affairs* 32, No. 3 (2013): 497-507, doi: 10.1377/hlthaff.2012.0431, http://content.healthaffairs.org/content/32/3/497.full.
 ¹⁰³ "Iowa Well Plan Section 1115 Demonstration," Centers for Medicare and Medicaid Services, 2016, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ia/ia-wellness-plan-ca.pdf.
- "Initial Report to Congress: Medicaid Incentives for Prevention of Chronic Diseases evaluation," U.S. Department of Health and Human Services, 2013, https://innovation.cms.gov/Files/reports/MIPCD_RTC.pdf.
- ¹⁰⁵ Medicaid Expansion Waivers in the States: Wellness Programs," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/wellness-programs.
- ¹⁰⁶ Medicaid Expansion Waivers in the States: Wellness Programs," Families USA, accessed March 10, 2017, http://familiesusa.org/medicaid-expansion-waivers-states#/wellness-programs.
- ¹⁰⁷ "The Use of Healthy Behavior Incentives in Medicaid," *MACPAC*, August 2016, https://www.macpac.gov/wp-content/uploads/2016/08/The-Use-of-Healthy-Behavior-Incentives-in-Medicaid.pdf.
- Robert Kane et al., "A Structured Review of the Effect of Economic Incentives on Consumers' Preventive Behavior," *American Journal of Preventive Medicine* 27, No. 4 (2004): 327-352, http://www.sciencedirect.com/science/article/pii/S0749379704001783.
- ¹⁰⁹ Karen Blumenthal et al., "Medicaid Incentive Programs To Encourage Healthy Behavior Show Mixed Results To Date and Should Be Studied and Improved," *Health Affairs* 32, No. 3 (2013): 497-507, doi: 10.1377/hlthaff.2012.0431, http://content.healthaffairs.org/content/32/3/497.full. ¹¹⁰ Maia Crawford and Matt Onstott, "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc,
- November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives_Opportunities-for-Medicaid_1.pdf.
- ¹¹¹ Jessica Greene, "Medicaid Efforts to Incentivize Healthy Behaviors," Center for Health Care Strategies, July 2007, http://www.chcs.org/media/Medicaid_Efforts_to_Incentivize_Healthy_Behaviors.pdf.
- ¹¹² Maia Crawford and Matt Onstott, "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives Opportunities-for-Medicaid 1.pdf.
- ¹¹³ Hannah Katch and Judith Solomon, "Are Medicaid Incentives an Effective Way to Improve Health Outcomes?" Center on Budget and Policy Priorities, January 24, 2017, http://www.cbpp.org/research/health/are-medicaid-incentives-an-effective-way-to-improve-health-outcomes.
- 114 Karen Blumenthal et al., "Medicaid Incentive Programs To Encourage Healthy Behavior Show Mixed Results To Date and Should Be Studied and Improved," Health Affairs 32, No. 3 (2013): 497-507, doi: 10.1377/hlthaff.2012.0431, http://content.healthaffairs.org/content/32/3/497.full.
- ¹¹⁵ Maia Crawford and Matt Onstott, "Healthy Behavior Incentives: Opportunities for Medicaid," Center for Health Care Strategies, Inc, November 2014, http://www.chcs.org/media/Healthy-Behavior-Incentives Opportunities-for-Medicaid 1.pdf.
- ¹¹⁶ "Cost Sharing Out of Pocket Costs," Medicaid.gov, accessed March 16, 2017, https://www.medicaid.gov/medicaid/cost-sharing/out-of-pocket-costs/index.html.
- ¹¹⁷ "Premiums and Cost-Sharing in Medicaid," The Henry J. Kaiser Family Foundation, February 2013, https://kaiserfamilyfoundation.files.wordpress.com/2013/02/8416.pdf.
- 118 Overview of Medicaid Cost Sharing and Premium Requirements," Medicaid.gov, November 25, 2014, https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf.

 119 Tricia Brooks et al., "Medicaid and CHIP Eligibility, Enrollment, Renewal, and Cost Sharing Policies as of January 2017: Findings from a 50-State Survey," The Henry J. Kaiser Family Foundation, January 12, 2017, https://kff.org/report-section/medicaid-and-chip-eligibility-enrollment-renewal-and-cost-sharing-policies-as-of-january-2017-premiums-and-cost-sharing/.