PhRMA
RESEARCH • PROGRESS • HOPE

950 F STREET, NW, SUITE 300 • WASHINGTON, DC 20004 • 202-835-3400 • PhRMA.org

December 18, 2019

Seema Verma
Administrator
Centers for Medicare & Medicaid Services
7500 Security Boulevard Baltimore, MD 21244

Re: Comments on Plan to Amend Tennessee's Section 1115 Demonstration: TennCare II Demonstration, Amendment 42 (11-W-00151/4)

Dear Administrator Verma:

We are writing on behalf of the Pharmaceutical Research and Manufacturers of America (PhRMA) regarding PhRMA's concerns with proposed Amendment 42 to the TennCare II Section 1115 Demonstration (11-W-00151/4), which the Centers for Medicare & Medicaid Services (CMS) posted for public comment on November 27, 2019. PhRMA represents the country's leading innovative biopharmaceutical research companies, which are devoted to discovering and developing medicines that enable patients to live longer, healthier, and more productive lives. PhRMA has a long-standing interest in promoting Medicaid beneficiaries' access to quality care and, consequently, we have concerns with the potential impact of the State's vague proposal and proposed waiver of key patient protections.

Tennessee is requesting changes to its Section 1115 demonstration to "convert the bulk of TennCare's federal funding to a block grant…intended to cover core medical services delivered to TennCare's core population."[1] In addition to the request to change to per capita block grant funding, Tennessee is requesting new flexibilities and certain exemptions for TennCare administrators from federal oversight.

PhRMA has grave concerns about the impact the drug-related proposals would have on Medicaid beneficiaries' continued access to crucial medications, and so urges CMS not to approve these elements of Tennessee's proposal for the reasons that we summarize here and expand upon in the remainder of this letter. This letter focuses on Tennessee's request for a "commercial-style closed formulary," as well as the ability to presumptively exclude drugs approved under the Food and Drug Administration (FDA's) accelerated pathway. It should be noted that such a request mimics the one made by the Commonwealth of Massachusetts, which CMS declined to approve just last year. Tennessee's proposal for CMS to waive the coverage requirements in the Medicaid rebate statute (Social Security Act (SSA) § 1927) raises the same policy concerns and legal defects as the Massachusetts request, including the risk of restricting access to medicines for Tennessee's most vulnerable populations. Moreover, this request stands to tears apart the careful balance struck in the rebate statute between pharmaceutical manufacturers' obligations to provide substantial rebates and states' obligations to ensure beneficiary access to most FDA-approved drugs.

In addition, although Tennessee's proposed block grant would be calculated in a manner that excludes costs associated with "outpatient prescription drugs," this term is not clearly defined in the proposal. To the extent the State may seek to *include* certain drugs in the calculation of the block grant, such as physician-administered drugs that are billed on medical claims rather pharmacy claims, the State should be clear with CMS and the public about which drugs would be paid under the capped financing portion of the waiver. Permitting Tennessee to include prescription drugs in the block grant may

[1] Notice of Change in TennCare II Demonstration: Amendment 42 at 1 (as modified Oct. 4, 2019), https://www.tn.gov/content/dam/tn/tenncare/documents2/Amendment42ComprehensiveNotice.pdf.

jeopardize beneficiaries' access to needed treatment for chronic conditions, cancers, and immune disorders. The absence of any clear statement to this effect in the proposal deprives the public of a meaningful opportunity to comment on this significant policy proposal.

PhRMA recognizes that Tennessee is searching proactively for solutions to better manage State Medicaid expenditures. However, the proposed new structure could result in a disruption of care for nearly 1.4 million Tennesseans, over 10 percent of whom are individuals living with disabilities.[2] Amendment 42 could have the unintended consequence of upending decades of statutorily set state-federal Medicaid partnership and program functions that could endanger access to health care, including to necessary, life-saving medications for TennCare recipients.

Our detailed comments on these issues follow the outline below:

***

[2] TennCare II Section 1115 Quarterly Report (January - March 2019), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/tn/TennCare-II/tn-tenncare-qrt-rpt-jan-mar-2019.pdf.

I. The Request to Waive the Medicaid Rebate Statute's Formulary Provision Does Not Meet the Requirements for Approval Under SSA § 1115

Tennessee's Amendment 42 runs afoul of SSA requirements in at least three respects. First, the proposal would not meet the requirements that a Section 1115 demonstration program be "likely to assist in promoting [Medicaid] objectives."[3] Second, waiving the Medicaid rebate statute's coverage requirements alone (without waiving the requirements for manufactures to pay rebates) would impermissibly tear apart the legislative bargain reflected in the Medicaid rebate statute.[4] Third, Tennessee's request fails to propose a legitimate research question, as required under Section 1115.

The proposal for a closed formulary does not meet the statute's requirement that a Section 1115 demonstration assist and promote Medicaid's objectives. Under Tennessee's request to implement a closed formulary, a drug could be excluded for two different reasons: first, to reduce the number of drugs in a class to one so that "the State could offer manufacturers an essentially guaranteed volume in exchange for a larger rebate"; and second, to presumptively exclude drugs that received accelerated approval from FDA "until market prices are consistent with prudent fiscal administration or the State determines that sufficient data exist regarding the cost effectiveness of the drug."[5] Neither of these rationales advance the objectives of the Medicaid statute. Further, a closed formulary would severely restrict a physician's ability to prescribe the most effective medicine for a patient and could lead to more costly treatments, such as emergency department visits, hospitalizations and added procedures.

Tennessee's proposed closed formulary is, moreover, inconsistent with the Medicaid rebate statute set out in SSA Section 1927. Under this statute, drug manufacturers pay rebates on Medicaid utilization of their covered outpatient drugs in return for state Medicaid programs covering all of these drugs.[6] This coverage is subject only to certain "permissible restrictions," such as states' ability to condition coverage or limit the amount dispensed as long as they provide a prior authorization process by which patients can obtain access to needed drugs.[7] Under the proposal, Tennessee seeks to establish a closed formulary, which the State indicates could be limited to a single drug in each therapeutic class (subject to a vaguely described exceptions process). But, state coverage obligations are not severable from manufacturer rebates, and the State's proposal would violate the legislative bargain in the Medicaid rebate law by doing so. Moreover, the ability to limit coverage to a single drug per class could result in coverage less generous than what Medicare and other payers offer and would disadvantage Medicaid patients by denying them access to innovative treatments. Either result would be ill-suited to caring for America's neediest, most vulnerable patients.

Finally, Tennessee's proposal fails to specify how it will serve as an "experimental" or "demonstration" project as required under Section 1115. The State appears to propose a series of cost-cutting measures without research metrics to determine if the additional flexibilities the State is requesting further the core objectives of the Medicaid programs, which is not permissible under Section 1115. Furthermore, the proposal lacks the specificity needed to be considered a demonstration project under Section 1115. The State also is requesting broad flexibilities and permanency to make changes to its Medicaid programs in the future without federal oversight, public input, and potentially provider or beneficiary notification, which has the potential to harm Medicaid patients and providers alike from lack of input and oversight. For example, to the extent that

---

[3] SSA § 1115(a).

[4] *Id.*

[5] TennCare II Demonstration Amendment 42 at 15.

[6] SSA § 1927(d) [hereinafter Section 1927] describes the permissible restrictions state Medicaid programs can place on the drugs of a manufacturer with a Medicaid Rebate Agreement, including with respect to formulary decisions, prior authorization, and limits on prescriptions.

[7] SSA § 1927(d)(1).

Tennessee updates its formulary or erects barriers to eligibility and enrollment without federal oversight, beneficiary access to drugs could be further jeopardized.

A. Waiving the Medicaid Rebate Statute's Drug Coverage Requirements Would Not Promote Medicaid Objectives

Any Section 1115 demonstration project must be "likely to assist in promoting the objectives of [Medicaid]."[8] Based on the SSA's language and structure, the U.S. Department of Health and Human Services (HHS) and the courts all agree that "the core objective of the Medicaid Act is to furnish health-care coverage to the needy."[9] Among other features of Amendment 42, allowing a wholesale waiver of the drug coverage requirements in the rebate statute would not promote this objective. Such a waiver would reduce beneficiaries' access to medicines and affect their health adversely in two ways: directly, by permitting the State to cut back on drug coverage; and indirectly, by eliminating or curtailing manufacturers' incentives to participate in the Medicaid rebate program, as described below. The rebate program could unravel quickly if one selective waiver of the rebate statute's coverage requirements were granted, as other states would likely seek the same waiver once the precedent was established; this would be a serious setback for Medicaid objectives and for beneficiaries' health and well-being.

1. Restricted Formularies Increase the Risk of Patient Harm

The direct damage from the waiver is easy to anticipate—and also concerning—because the impact of that restrict drug access for vulnerable populations has been extensively studied. Importantly, these studies show that restricting access to drugs through closed formularies results in non-adherence or poor adherence to prescribed medication regimens; worsened health outcomes; and higher long-run costs, both to Medicaid and other state and local programs. A detailed summary of the research in this area and what it shows about the clinical and cost effects of imposing restricted formularies on vulnerable patient populations, such as Medicaid beneficiaries, is provided in Attachment A of this letter. But a few key points are worth highlighting at the outset, the first being the important role that a choice of medicines plays in improving patient outcomes. Without access to multiple drugs in a class as well as the latest formulations, patients and their physicians cannot treat or manage the patient's conditions effectively.

Medicaid patients, compared to those with other types of insurance, have higher rates of complex and chronic health conditions that often require access, without delay, to a broad range of medicines as prescribed by their physicians in order to achieve optimal therapeutic results. These concerns are all the more acute because Tennessee's proposal pertains to the "core" TennCare populations, who are more medically vulnerable than non-disabled adults. In addition to poorer health status, Medicaid patients tend to be more financially vulnerable, with few to no alternative options to obtain the medicines they need. Patients who access health insurance through employers or the individual market often have more options to select different coverage or pay out of pocket when needed.

---

[8] SSA § 1115(a).

[9] Philbrick v. Azar, 397 F. Supp. 3d 11, 23 (D.D.C. 2019); Gresham v. Azar, 363 F. Supp. 3d 165, 176 (D.D.C. 2019) (noting that the HHS Secretary "refers to the provision of medical care to eligible persons as 'Medicaid's core objective.'"); SSA § 1901 (describing the purpose of the Medicaid program as enabling states to furnish "medical assistance on behalf of families with dependent children and of aged, blind, or disabled individuals, whose income and resources are insufficient to meet the costs of necessary medical services," as well as "rehabilitation and other services to help such families and individuals attain or retain capability for independence or self-care"); *see also, e.g.*, Letter from Calder Lynch, Acting Deputy Administrator and Director, Center for Medicaid & CHIP Services, to Renee Gayhart, Director, Alaska Division of Health Care Services, at 2 (Sept. 3, 2019), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/ak-behavioral-health-demo-ca.pdf ("[A]n important objective of the Medicaid program is to furnish medical assistance and other services to vulnerable populations," and to " advance the health and wellness needs of its beneficiaries.").

If the State adopts a closed formulary, even an exceptions process would not guarantee access to needed medication for TennCare beneficiaries if the formulary does not include a needed medication. Tennessee provides almost no detail about how the exceptions process would work, leaving the public unable to determine which scenarios will qualify beneficiaries for an exception, how the State will ensure that beneficiaries and providers are aware of and able to use the exceptions process, and how burdensome the process will be in terms of steps required and length of delay in access. Tennessee's proposal briefly references the existing TennCare prior authorization process, but the stakes are much higher when the State is requesting to limit the formulary to a single drug per therapeutic class, and to presumptively exclude all drugs approved through the accelerated approval pathway. Medicaid providers in Tennessee are reimbursed at lower rates than commercial or Medicare providers,[10] and thus may have less time and staff resources available to help their patients navigate the exceptions processes required to obtain coverage for an off-formulary medication. This may be particularly challenging for many Medicaid patients due to generally lower levels of health literacy.[11] Even with an exceptions process in place, there is little chance that a TennCare beneficiary would be able to obtain all of the medications that would be most clinically appropriate for him or her if confronted with a closed formulary.

Further, the body of existing research has shown that restricting access to prescription drugs harms patients and increases medical costs. For example:

- Numerous studies have found strong evidence demonstrating that formulary restrictions are negatively correlated with medication adherence outcomes.[12] A New England Journal of Medicine article highlighted that medication non-adherence can lead to death as well as cost the U.S. economy up to $300 billion annually in "avoidable" health care costs.[13]

- Evidence has shown that formulary restrictions in Medicaid for patients with severe mental illness result in low drug savings, negative patient outcomes, higher overall Medicaid spending, and increased incarceration rates.[14]

- One study found that restricting access to antidepressants in Medicaid was associated with a 16.6 percent increase in the likelihood of hospitalization for a mental health condition, with no evidence of total Medicaid savings.[15]

- Another study found that restricting access to schizophrenia and bipolar medicines increased inpatient and total costs to the Medicaid program by 10-23 percent, without lowering pharmacy costs.[16]

---

[10] Kaiser State Health Facts, "Medicaid-to-Medicare Fee Index" (2016); W. Fox & J. Pickering, "Hospital & Physician Cost Shift Payment Level Comparison of Medicare, Medicaid, And Commercial Payers," Milliman (2008).

[11] iTRIAGE, "Tracking American Health Literacy and Prescribing Improvement: Key findings from an independent survey," Available at: http://www.itriagehq.com/wp-content/uploads/2015/02/Health-Literacy-White-Paper_February-2015.pdf. (accessed Jan. 29, 2017).

[12] Happe LE, Clark D, Holliday E, Young T. A systematic literature review assessing the directional impact of managed care formulary restrictions on medication adherence, clinical outcomes, economic outcomes, and health care resource utilization. J Manag Care Spec Pharm. 2014;20(7):677-84.

[13] Zullig, LL, Bosworth, H, Engaging patients to optimize medication adherence. NEJM Catalyst (May 14, 2017).

[14] USC Schaeffer, "Medicaid Access Restrictions on Psychiatric Drugs: Penny-wise or Pound-Foolish?" (February 2015), http://healthpolicy.usc.edu/documents/USC%20Issue%20Brief%20No.%202%20Final.pdf.

[15] *Id.*

[16] *Id.*

- Access restrictions to antipsychotics for Medicaid beneficiaries are estimated to cost $1 billion annually in societal costs due to increased incarceration rates.[17]

- Researchers found that formulary restrictions for Medicaid beneficiaries in Arizona living with rheumatoid arthritis had unintended consequences including increasing hospitalizations by 50 percent and costing an additional $900 annually.[18]

- HHS guidelines for the treatment of HIV recommend combination regimens consisting of medications from two distinct classes to effectively suppress the HIV virus and, as a result of suppression, prevent transmission to others.[19] Regimen adherence is imperative to maintain durable viral suppression, and HHS guidelines recommend the choice of regimen should be individualized with factors such as pill burden, once-daily regimens, tolerability, and food requirements in mind. Higher adherence has been shown to not only keep patients healthy but also lower overall health care costs.[20] Restricting access to medicines would thus negate the HHS guidelines and undermine the Administration's own efforts to "treat HIV rapidly and effectively achieve sustained viral suppression," an essential component of the Administration's plan to reduce new HIV infections in the United States by 75 percent in five years and by 90 percent by 2030.[21]

There is little to nothing for Tennessee to "test" or learn by developing a closed formulary as there is ample evidence of negative consequences when other states have restricted access to medicines. This area has been studied extensively and Tennessee should not seek to duplicate the results already established in the literature, demonstrating that the closed formulary would adversely affect TennCare patients' health. Moreover, the research cited above suggests that, far from saving the State money, a closed formulary may actually increase TennCare spending. Limiting beneficiaries' access to needed drugs will lead to worse health outcomes and, ultimately, greater utilization of other healthcare services, such as emergency visits and hospitalizations.

2. Tennessee's Proposal Prioritizes Costs Over Clinical Efficacy

The risks of patient harm are exacerbated by Tennessee's apparent desire to construct a formulary that prioritizes costs over clinical efficacy or patient need. In these respects, Tennessee's proposal threatens beneficiaries' coverage and health even more than did Massachusetts' request, which CMS rightly rejected, as described below. Under Section 1927 of the SSA, states may exclude a drug from the formulary only if the drug's labelling or certain compendia establish that the drug has no "therapeutic advantage in terms of safety, effectiveness, or clinical outcome" compared to "other drugs included in the

---

[17] *Id.*

[18] Tricia J. Johnson, Stephanie Stahl-Moncada, "Medicaid Prescription Formulary Restrictions and Arthritis Treatment Costs," American Journal of Public Health 98, No. 7 (July 1, 2008): pp.1300-05.

[19] HHS Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents, https://aidsinfo.nih.gov/guidelines (last accessed Nov. 14, 2019); *Effectiveness of Prevention Strategies to Reduce the Risk of Acquiring or Transmitting HIV*, Centers for Disease Control and Prevention, https://www.cdc.gov/hiv/risk/estimates/preventionstrategies.html (last accessed Sept. 20, 2019).

[20] Express Scripts. *Viral Signs: U.S. Trends in HIV Medication Use, Care and Cost* (Nov. 2018). http://lab.express-scripts.com/lab/publications/viral-signs-understanding-hiv-medication-use; Sutton SS, Magagnoli J, Hardin J. Impact of Pill Burden on Adherence, Risk of Hospitalization, and Viral Suppression in Patients with HIV Infection and AIDS Receiving Antiretroviral Therapy. *Pharmacotherapy* 2016;36(4):385-401.

[21] *What is 'Ending the HIV Epidemic: A Plan for America'?*, HIV.gov, https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview.

formulary."[22] Even then, the State must permit beneficiaries to access otherwise-excluded drugs by following the State's rules for prior authorization.[23]

Tennessee seeks to waive these requirements, requesting to close its formulary and make coverage decisions in each therapeutic class based on whether manufacturers have offered sufficiently "favorable rebate agreements."[24] This cost-based approach is nothing more than cost-based rationing for the most vulnerable among us, and thus is starkly out of step with Section 1927's "therapeutic advantage" requirement. Moreover, Tennessee requests to presumptively exclude drugs approved by the FDA accelerated pathway unless and until the State deems the drug's price sufficiently low, or the drug's cost-effectiveness sufficiently high. Tennessee proposes to rely entirely on cost-based metrics—metrics that are not considered as part of FDA's approval process, whether or not the drug is approved through the accelerated pathway.

Moreover, the proposal does not explain how drug cost-effectiveness will be assessed or how formulary decisions will be made, depriving the public of a meaningful opportunity to comment on Tennessee's proposed changes to a Medicaid drug benefit that has long protected access to generally all medically accepted indications of covered outpatient drugs. In response to numerous and concerns raised during the State comment period on a closed formulary, Tennessee made minor edits to its proposal stating that, "[i]n selecting drugs available in each therapeutic class, the state will ensure that the selected drugs meet the clinical needs of the vast majority of members and that they are cost effective."[25] This hollow promise fails to acknowledge the diverse needs of TennCare's heterogenous patient population, however. Tennessee has, in the past, been cited for unduly delaying or restricting access to crucial drugs under its existing demonstration authority .[26] And throughout this letter, we cite research results showing that restricting access to drugs inevitably harms patient outcomes. A recent study by Xcenda, for example, found that using "one size fits all" cost analyses could harm patient access to necessary treatment, affecting 44 to 99 percent of prescriptions, or 870,000 prescriptions for medicines, used to treat serious, complex conditions like multiple sclerosis and various forms of cancer.[27]

3. Restricting Access to "Accelerated Pathway" Drugs Would Ration Access to Life-Saving Medicines to the Detriment of the Sickest Patients and Supplant the Judgment of the Physician and Patient

In addition to waiving the rebate statute's drug coverage requirements, the requested waiver would ration care to the detriment of the sickest patients by restricting access to drugs that FDA has determined to be safe and effective and deserving of accelerated approval because they are intended for treatment of "serious or life-threatening disease[s] or condition[s]," including areas of unmet medical needs. Tennessee's proposal discounts the value of these crucial drugs, commenting that "many of them have not yet demonstrated actual clinical benefit and have been studied in clinical trials using

---

[22] SSA § 1927(d)(4)(C).

[23] SSA § 1927(d)(4)(D). The state must, for example, respond to prior authorization requests within 24 hours. SSA § 1927(d)(5)(A).

[24] TennCare II Demonstration Amendment 42 at 15.

[25] *Id.* at 15.

[26] *See, e.g.*, Letter from Michael Nardone, Director, Disabled & Elderly Health Progs. Grp, and Eliot Fishman, Director, State Demonstration Grp., Ctr. for Medicaid & CHIP Services, to John G. Roberts, General Counsel, Bureau of TennCare (June 1, 2016) (citing the State for impermissibly delaying beneficiary access to new drugs for up to six months from the date of FDA approval while the State's Pharmacy Advisory Committee reviewed the drug for placement on the State's preferred drug list).

[27] Impact Analysis of ICER Formulary Implementation in Medicaid, https://www.xcenda.com/-/media/assets/xcenda/english/content-assets/white-papers-issue-briefs-studies-pdf/icer-medicaid-analysis_march-2019.pdf?la=en&hash=03590A12822FB95144692F0BF6FFF846E2E26F1A

only surrogate endpoints."[28] The State proposes to exclude these new drugs from its formulary until "market prices are consistent with prudent fiscal administration or the state determines that sufficient data exist regarding the cost effectiveness of the drug."[29] As noted above, the request is unclear as to how Tennessee would set these vague, undefined standards for inclusion on the formulary, the standards by which the State would ration life-saving medicines.

This proposal, moreover, would directly undermine Congress's very purpose in enacting the accelerated approval pathway—speeding patient access to desperately needed treatments by allowing FDA to "implement more broadly effective processes for the expedited development and review of innovative new medicines intended to address unmet medical needs for serious and life-threatening diseases or conditions."[30] However, instead of expediting patient access to safe and effective treatments, the proposal would restrict patient access to these medicines, undermining the intent of accelerated approval.

Established statutorily in 2012 but rooted in regulatory reforms FDA initiated in response to the HIV/AIDS crisis in the early 1990s, the accelerated approval program authorizes FDA to approve an application for a product "for a serious or life threatening disease or condition…upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit,…taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative therapies."[31] Sponsors of accelerated approval products may be required to "conduct appropriate post-approval studies to verify and describe the predicted effect" of the drug.[32] Accelerated approval is critical for increasing access to drugs that treat serious and life-threatening diseases and conditions with a long disease course because the need to directly establish the ultimate clinical benefit otherwise would prevent approval for an extended period of time. For example, drugs indicated for treatment of HIV are often approved on the basis of clinical studies showing a decrease in the overall amount of the HIV virus. Measuring reduction in viral load, a validated surrogate endpoint that demonstrates clinical benefit, allows more efficient clinical trials.

As the Federal Food, Drug, and Cosmetic Act (FDCA) confirms, accelerated approval does not alter the statutory standard for new drug approval, and accelerated approval requires "substantial evidence" of clinical benefit.[33] And just this past August, FDA emphasized once again that accelerated approval drugs "meet FDA standards for safety and efficacy" and "must meet the same statutory standard for approval" as all other FDA-approved drugs.[34] The standard of evidence thus does not change; only the type of evidence that is evaluated. The accelerated approval program permits FDA to approve drugs for a "serious or life-threatening condition" based on a determination that the drug has an effect on a surrogate or other endpoints that is "reasonably likely to predict a real clinical benefit."[35] As FDA has explained:

---

[28] TennCare II Demonstration Amendment 42 at 15.

[29] *Id.*

[30] *See* Food and Drug Administration Safety and Innovation Act, Pub. L. No. 112-144, § 901(a)(1)(C), 126 Stat. 993, 1082 (2012); *see also* FDA, Guidance for Industry, Expedited Programs for Serious Conditions – Drugs and Biologics (May 2014) ("The provisions of FDASIA facilitate somewhat broader use of accelerated approval to expedite patients' access to important treatments for serious conditions.").

[31] 21 U.S.C. § 356(c)(1)(A).

[32] *Id.* § 356(c)(2)(A).

[33] *Id.* § 356(e)(2) (referencing 21 U.S.C. § 355(d)).

[34] Delivering Promising New Medicines Without Sacrificing Safety and Efficacy, FDA (last modified Aug. 27, 2019), https://www.fda.gov/news-events/fda-voices-perspectives-fda-leadership-and-experts/delivering-promising-new-medicines-without-sacrificing-safety-and-efficacy.

[35] 21 U.S.C. § 356(c) (emphasis added); Accelerated Approval, FDA (last modified Jan. 4, 2018), https://www.fda.gov/patients/fast-track-breakthrough-therapy-accelerated-approval-priority-review/accelerated-approval.

> [A]ccelerated approval has been used extensively in the approval of drugs to treat a variety of cancers and human immunodeficiency virus (HIV) disease where an effect on tumor growth or viral load can be assessed rapidly but demonstrating an effect on survival or morbidity generally requires lengthy and sometimes large trials because of the duration of the typical disease course.[36]

The proposed exclusion is particularly concerning given the types of drugs that often receive accelerated approval and the patients who typically benefit from their use. For example, several oncology drugs receiving accelerated approval have been recognized by the American Society of Clinical Oncology as the treatment "Advance of the Year,"[37] and several of the novel drugs (i.e., new molecular entities and new therapeutic biological products) that FDA approves each year receive accelerated approval.[38] Notable examples of drug products receiving accelerated approval include the first ever treatment for a rare, aggressive form of cancer, the first therapy targeting a type of cancer with a particular gene abnormality, an HIV treatment active against a particular strand of the virus, and a treatment inhibiting a particular pathway to treat the most common form of one type of cancer. Thus, excluding drug products receiving accelerated approval would in many cases prevent patients from realizing the benefits of modern medical advancements. Indeed, research has shown that drugs approved through the accelerated pathway "offered larger health gains, compared to drugs approved through conventional review processes."[39] Denying Medicaid beneficiaries access to these therapies would affect their health adversely—potentially in very serious and life-threatening ways—and would send the message that Medicaid is a second-class health care program.

Restricting access to drugs receiving accelerated approval would, moreover, withhold needed therapies from the sickest patients who often are in the most dire need of immediate treatment. Drugs that receive accelerated approval can reach the market months or years earlier than would be possible under the "traditional" approval pathway. A few months or years can be a matter of life or death, however, when the drug product is approved to treat a disease or condition that substantially limits patients' life expectancy. It would be unjust to prevent vulnerable Medicaid beneficiaries from accessing a potentially life-saving drug that has received the FDA's stamp of approval, especially if commercially insured individuals have faster or more ready access to the benefits of pharmaceutical innovation.

Additionally, the proposal would supplant the considered judgment of the individual patient and his or her treating physician. Whether a treatment provides clinical benefit to an individual patient is a decision that should be made by the patient and the patient's treating physician; FDA has determined that the drug is safe and effective, so Tennessee should not undermine the authority of FDA and the autonomy of the patient-doctor relationship.

4. A Closed Formulary Puts Beneficiaries at Risk Without Offering Commensurate Benefits

These risks come without any benefits for Medicaid patients. A closed formulary would restrict beneficiaries' access to essential medications for the sole purpose of reducing Tennessee's Medicaid expenditures. Section 1115 allows states to enact many types of program adjustments, including policies that may limit coverage in some respects, as long as the demonstration advances Medicaid objectives. What states cannot do, however, is "prioritize program savings" without even

---

[36] FDA, Guidance for Industry, Expedited Programs for Serious Conditions – Drugs and Biologics at 15 (May 2014).

[37] American Society of Clinical Oncology. "Advance of the Year: Immunotherapy 2.0" (2017).

[38] In 2016, six out of 22 (27%) approved novel drugs received accelerated approval. *See* 2016 Novel Drugs Summary, at 8, *available at* https://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/DrugInnovation/UCM536693.pdf.

[39] James D. Chambers et al., Drugs Cleared Through the FDA's Expedited Review Offer Greater Gains Than Drugs Approved By Conventional Process, 36 Health Affairs 1408, 1408 (2017).

acknowledging—much less weighing—"the consequences of lost coverage."[40] To the contrary, the State and the HHS Secretary "must obviously consider the impact" of the State's proposed demonstration on the beneficiaries that Medicaid "was enacted to protect."[41] And in this case, the impact cannot reasonably be written off as a necessary consequence of reducing Medicaid costs in order to keep the program sustainable.

Tennessee's request for a closed formulary would undermine access to drugs for Medicaid beneficiaries, especially with respect to new drugs approved under the FDA's accelerated pathway. Tennessee's proposal "hinders the provision of health coverage to the needy" by jeopardizing Medicaid beneficiaries' access to care.[42] The State asserts no countervailing benefits for patients. The proposal is thus contrary to the objectives of the Medicaid statute, and cannot be approved.

B. The Medicaid Rebate Statute Is a Package Deal that Cannot Be Torn Apart by a Selective Waiver of Its Coverage Requirements Alone

CMS cannot waive the Medicaid rebate statute's coverage requirements while leaving in place the requirement for manufacturers to pay rebates on Medicaid utilization. Such a one-sided waiver would breach the careful legislative bargain Congress created in the Medicaid rebate statute, described by Congressman Henry Waxman, a key sponsor, as a "government-industry compact."[43] As CMS has explained:

> [D]rug manufacturers must pay statutorily-defined rebates to the states through the Medicaid drug rebate program. In return, any state that provides payment for drugs must cover all covered outpatient drugs, which may include appropriate limitations on amount, duration, and scope, for the drug manufacturers that participate in the Medicaid drug rebate program.[44]

CMS fully recognizes this statutory compact, as demonstrated by actions it took last year in response to a Section 1115 waiver amendment request from Massachusetts to establish a closed formulary and exclude coverage of "accelerated approval pathway" drugs.[45] On June 27, 2018, CMS rejected this part of Massachusetts' request on the grounds that it "would have allowed the State to continue to collect manufacturer rebates under Section 1927, while enabling the State to exclude certain drugs from coverage," thereby rupturing the statute's careful balance.[46] CMS has thus squarely foreclosed the precise path that Tennessee now seeks to follow.

---

[40] Stewart v. Azar, 366 F. Supp. 3d 125, 149 (D.D.C. 2019) (emphasis added).

[41] Newton-Nations v. Betlach, 660 F.3d 370, 380 (9th Cir. 2011).

[42] Gresham v. Azar, 363 F. Supp. 3d 165, 178 (D.D.C. 2019).

[43] Medicare and Medicaid Reconciliation: Hearings Before the Subcomm. on Health and the Environment of the Committee on Energy and Commerce, H. Hrg. 103-61, 103rd Cong. 453 (1993) (statement of Rep. Waxman).

[44] 78 Fed. Reg. 4594, 4631 (Jan. 22, 2013) (emphasis added). The rebate statute's legislative history similarly emphasizes this compact: "Because the Committee is concerned that Medicaid beneficiaries have access to the same range of drugs that the private patients of their physicians enjoy, the Committee bill would require states that elect to offer prescription drugs to cover all of the products of any manufacturer that agrees to provide price rebates." H. Rpt. 101-881, 101st Congress, 2d Session (Oct. 16, 1990) (emphasis added).

[45] MassHealth Section 1115 Demonstration Amendment Request (Sept. 8, 2017), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ma/ma-masshealth-pa3.pdf.

[46] Letter from Tim Hill, Acting Director, Ctr. for Medicaid & CHIP Services, to Daniel Tsai, Assistant Sec'y, MassHealth, at 2 (June 27, 2018) [hereinafter "CMS Response to Massachusetts"], https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ma/MassHealth/ma-masshealth-demo-amndmnt-appvl-jun-2018.pdf.

Concurrent with the letter to Massachusetts, CMS issued a Program Notice emphasizing that Medicaid programs may not exclude coverage for a drug merely because it was approved under FDA's accelerated pathway. By definition, these are "drugs for serious conditions that fill an unmet medical need," which have, to FDA's satisfaction, shown promising results on surrogate or intermediate clinical endpoints that are "reasonably likely to predict a real clinical benefit."[47] A drug that has received FDA approval, accelerated or otherwise, "meets the definition of [a] covered outpatient drug" under Section 1927(k), meaning that "the drug must be covered by state Medicaid programs if the manufacturer has an applicable signed Medicaid national drug rebate agreement."[48]

Although Tennessee's proposal does not indicate whether the State is willing to give up the rebates it currently receives under Section 1927, the State has indicated in meetings that its proposal is modeled on Massachusetts's request for a closed formulary without forgoing the rebates required under Section 1927. Just like Massachusetts, Tennessee has proposed a closed formulary based on a waiver of Section 1927 (via a waiver of Section 1902(a)(54)), and would limit access to accelerated approval drugs, thereby second-guessing FDA approval decisions.[49] This request for a waiver of drug coverage requirements under Section 1927(d)(4), without also waiving the State's access to mandatory rebates under the Medicaid Drug Rebate Program, is flatly inconsistent with binding law and CMS policy. Any approved waiver along these lines would, moreover, risk unraveling the Medicaid rebate program by undermining the careful balance of incentives in the Medicaid rebate statute. Permitting any state to cut back on drug coverage would eliminate or curtail manufacturers' incentives to participate in the Medicaid Drug Rebate Program, a program that has successfully provided Medicaid beneficiaries "access to the same range of drugs that the private patients of their physicians enjoy" since its start in 1991.[50]

We recognize that, in rejecting Massachusetts' request for a closed formulary, CMS outlined a potential path to a closed formulary if a state dropped its outpatient drug benefit under Section 1927 and constructed a new drug benefit "under the expenditure authority in section 1115(a)(2)."[51] We do not read Tennessee's proposal as requesting to replace the existing TennCare drug benefit with a new benefit designed under Section 1115(a)(2). Under "Proposed Waiver and Expenditure Authorities," for example, the State has *only* requested a waiver of section 1927 via a waiver of the State plan requirement at section 1902(a)(54), and has specified that the waiver is solely for the purpose of establishing "a formulary that does not comply with Section 1927(d)(4) of the Social Security Act."[52] If, in the future, Tennessee seeks to construct a wholly new drug benefit under Section 1115(a)(2) using a closed formulary, it is crucial that the State say so expressly, and moreover, that the State explain how it will ensure beneficiaries' continued access to medically necessary drugs. The State must specify, for example, whether current statutory cost-sharing protections, such as sections 1916 and 1916A, will continue to apply. Consistent with Medicaid's transparency and public notice requirements, Tennessee should provide stakeholders another opportunity to comment publicly on a more fully developed proposal under Section 1115(a)(2) prior to submitting the proposal to CMS, as discussed below.

---

[47] Accelerated Approval, FDA (last modified Jan. 4, 2018), https://www.fda.gov/patients/fast-track-breakthrough-therapy-accelerated-approval-priority-review/accelerated-approval; *see also* 21 U.S.C. § 356(c).

[48] Medicaid Drug Rebate Program Notice, State Medicaid Coverage of Drugs Approved by the FDA under Accelerated Approval Pathway, CMS (June 27, 2018), https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/rx-releases/state-releases/state-rel-185.pdf (emphasis added).

[49] SSA Section 1902(a)(54) [hereinafter Section 1902].

[50] H. Rpt. 101-881, 101st Congress, 2d Session (Oct. 16, 1990).

[51] CMS Response to Massachusetts at 2.

[52] TennCare II Demonstration Amendment 42 at 25.

C. A Permanently Closed Formulary Is Not a Permissible "Experimental, Pilot or Demonstration Project" Under Section 1115

Section 1115 authorizes the Secretary to approve "experimental, pilot, or demonstration project[s]." Tennessee's proposal for a permanently closed formulary fails to satisfy this requirement.

Demonstration projects approved under Section 1115 must not only serve the objectives of the Medicaid program, but must also be designed and intended to learn or demonstrate something new. As the Ninth Circuit has explained:

> The statute was not enacted to enable states to save money or to evade federal requirements but to test out new ideas and ways of dealing with the problems of public welfare recipients. Thus, the Secretary must make some judgment that the project has a research or a demonstration value. A simple benefits cut, which might save money, but has no research or experimental goal, would not satisfy this requirement.[53]

Courts have thus rejected waivers that purported to "test" policies that had already been proven unsound based on well-established evidence. In Newton-Nations v. Betlach, for example, the Ninth Circuit concluded that the HHS Secretary acted impermissibly by approving a 1115 demonstration project that heightened beneficiaries' copayment obligations. The court described expert testimony detailing numerous studies on "the effects of cost sharing on the poor," but saw no evidence in the administrative record that the approved "demonstration project will actually demonstrate something different than the last [35 years' worth] of health policy research."[54]

Nothing in Tennessee's proposal suggests that the requested waiver would advance knowledge of the impact of more limited access to medicines for the needy. A large body of research exists on how restrictions on access to prescription drugs affect vulnerable populations, similar to the cost-sharing research cited in Newton-Nations. Section I.A.1 and Attachment A to this letter provides a detailed summary of that body of research, which shows that imposing formulary restrictions on vulnerable populations generally produces adverse effects on beneficiaries' health; increases the risks of justice system contacts and other social problems; and increases overall health care costs, as beneficiary care increasingly shifts from outpatient drugs to hospitalizations and ER visits. The most Tennessee's demonstration could possibly achieve would be to replicate the negative outcomes found in the existing literature. This is not research, but a "simple benefits cut," with a wholly predictable outcome, and is therefore inconsistent with Section 1115's purpose.

In addition, Section 1115 waivers must be approved in advance for a finite duration, reflecting their experimental nature, and also to provide regular opportunities for CMS oversight and renegotiation of terms with the State.[55] Tennessee is nonetheless requesting a waiver with permanent duration,[56] together with new authority to modify various program features in the future—including enrollment procedures, covered benefits, and managed care contracts and rates—without seeking CMS

---

[53] Beno v. Shalala, 30 F.3d 1057, 1069 (9th Cir. 1994) (emphasis added) (citations and internal quotation marks omitted).

[54] Newton-Nations, 660 F.3d 370, 381 (9th Cir. 2011) (internal quotation marks omitted).

[55] *See* 77 Fed. Reg. 11679 (Feb. 27, 2012) ("Because demonstration projects are approved to pilot or experiment with new approaches, it is particularly important to evaluate such projects and to share lessons learned."). States may, for example, apply to extend an existing demonstration "for a period not to exceed 3 years." SSA §§ 1115(e)(2), (f)(6). An extension application must include a description of "the objectives set forth at the time the demonstration was approved, evidence of how these objectives have or have not been met, and the future goals of the program." 42 C.F.R. § 431.412(c)(2)(i). "If an extension application includes substantial changes to the existing demonstration, CMS may, at its discretion, treat the application as an application for a new demonstration." *Id.* § 431.412(c)(1).

[56] *See* TennCare II Demonstration Amendment 42 at 19.

approval.[57] Federal oversight of these crucial areas is essential to ensure that the waiver sufficiently protects the interests of Medicaid stakeholders including patients, providers, facilities, and managed care plans. Tennessee's request for a waiver of indefinite duration with limited monitoring belies any argument that this proposal is "experimental" in nature; this is not legitimate research, and the conclusions are pre-ordained. Moreover, these requests run directly counter to recent CMS guidance that underscores the importance of monitoring and evaluation in state demonstrations, for the sake of protecting both beneficiary health and the federal budget.[58]

II. CMS May Not Use Section 1115 to Undercut FDA's Statutory Mandate to Determine the Safety and Effectiveness of Drugs and Speed Their Availability to Patients

Congress vested FDA with the authority to assess the safety and efficacy of new drugs, and to designate certain drugs for accelerated approval. Tennessee's waiver request seeks to supplant the expert opinion of the FDA and an individual patient's treating physician with Tennessee's mandate by effectively excluding from coverage drugs that have received accelerated approval. This rationing of treatment undermines Congress's intent and is particularly concerning given the type of drugs that would fall under the proposed exclusion. At a more fundamental level, Tennessee's proposal mischaracterizes the accelerated approval standard.

A. Congress Entrusted FDA, not the States, with the Responsibility to Assess New Drugs for Safety and Efficacy

The FDA's mission, informed by active, bipartisan Congressional direction and support, is to promote the public health by using its expertise in evaluating scientific evidence to speed access to new treatments, especially for people with serious diseases and few options, without relaxing its rigorous safety and effectiveness standards. FDA's leaders have consistently emphasized this critical, statutorily prescribed mandate and the essential role of tools such as the accelerated approval pathway.[59]

In this waiver amendment request Tennessee proposes to exclude FDA-approved drugs that "have not yet demonstrated actual clinical benefit" and that rely on "surrogate endpoints."[60] This request—if granted by FDA's sister agency, CMS—would signal to patients, health care providers, state Medicaid programs, and other payors that they cannot rely upon FDA determinations that a drug is safe and effective; that the safety and effectiveness of accelerated approval drugs in particular needs additional evaluation; and that Medicaid beneficiaries—a population that suffers disproportionately from serious diseases and oftentimes lack effective treatment options, including many children who suffer from deadly and debilitating diseases—can do without these drugs. The waiver would thus diminish FDA's statutory role as the expert agency charged with determining the safety and effectiveness of pharmaceuticals and supplant FDA's judgments with those of the State; and it would weaken FDA's ability to promote public health by speeding innovative treatments to seriously ill patients with unmet needs.

Granting this waiver would threaten FDA's ability to achieve the principal purposes of the accelerated

---

[57] *See id.* at 21.

[58] CMS Strengthens Monitoring and Evaluation Expectations for Medicaid 1115 Demonstrations, CMS (Mar. 14, 2019), https://www.cms.gov/newsroom/press-releases/cms-strengthens-monitoring-and-evaluation-expectations-medicaid-1115-demonstrations.

[59] *See, e.g.*, FDA White Pape, FDA Accelerating the Development of New Pharmaceutical Therapies, 7-8 (Mar. 23, 2015); 21st Century Cures Act; Making Progress on Shared Goals for Patients, FDA Commissioner Dr. Robert M. Califf, FDA Voice, Dec. 13, 2016.

[60] *See* TennCare II Demonstration Amendment 42 at 15.

approval provisions in the Federal Food, Drug and Cosmetic Act,[61] which were added to the FDCA in 2012 by section 901 of the Food and Drug Administration Safety and Innovation Act (FDASIA) to codify FDA's existing practices and policies under the agency's regulations, and to authorize and encourage FDA to use accelerated approval more broadly. Congress explained those purposes in the findings and sense of Congress provisions in FDASIA 901, which provide in part:

> (C) As a result of these remarkable scientific and medical advances, the FDA should be encouraged to implement more broadly effective processes for the expedited development and review of innovative new medicines intended to address unmet medical needs for serious or life-threatening diseases or conditions, including those for rare diseases or conditions, using a broad range of surrogate or clinical endpoints and modern scientific tools.... This may result in fewer, smaller, or shorter clinical trials for the intended patient population or targeted subpopulation without compromising or altering the high standards of the FDA for the approval of drugs.
>
> (D) Patients benefit from expedited access to safe and effective innovative therapies to treat unmet medical needs for serious or life-threatening diseases or conditions.[62]

The rebate statute attaches great importance to FDA approval decisions and generally requires state Medicaid programs to cover rebated drugs when they are used for "medically accepted indications"—including "any use for a covered outpatient drug which is approved under the Federal Food, Drug and Cosmetic Act."[63] Only with CMS approval could Tennessee cast off these obligations and limit FDA's ability to expedite access to novel treatments.

But CMS may not approve this waiver. Interpreting section 1115 to allow such a waiver would needlessly set up a conflict with the FDCA, by undercutting FDA's statutory role in determining the safety and effectiveness of drugs and its ability to accelerate access to treatments needed by seriously ill patients. When potential conflicts exist between two federal statutes, courts must apply "the familiar canon [of adopting] the interpretation that preserves the principal purposes of each."[64] If the two laws cannot be harmonized, then (absent specific direction from Congress) courts give effect to the most recently enacted law or to the law that more specifically addresses the matter at issue.[65]

---

[61] 21 U.S.C. § 356.

[62] FDASIA, Pub. L. No. 112-144, § 901(a)(1), 126 Stat. 993, 1082-83 (2012) (emphasis added).

[63] SSA § 1927(k)(6), (d).

[64] SmithKline Beecham Consumer Healthcare, LP v. Watson Pharmaceuticals, Inc. 211 F.3d 21, 27-28 (2d. Cir. 2000); *see also, e.g.*, Vornado Air Circulation Systems, Inc. v. Duracraft Corp., 58 F.3d 1498, 1507 (10th Cir. 1995) ("Except to the extent that Congress has clearly indicated which of two statutes it wishes to prevail in the event of a conflict, we must interpret and apply them in a way that preserves the purposes of both and fosters harmony between them"); Zenith Electric Corp. v. Exzec, Inc., 182 F.3d 1340, 1347 (Fed. Cir. 1999) (same); FMC Corp., v. Control Solutions, Inc., 369 F. Supp.2d 539, 571 (E.D. Pa. 2005) (statutes in conflict should be interpreted to preserve "principal purpose" of each, but no conflict between two statutory regimes existed where "the EPA regulations do not explicitly require copying [in violation of the Copyright Act] of the original and pioneer label and the applicable statutes and regulations here do not intimate such a result"); IRIS Corp. v. Japan Airlines Int'l Co., 2009 WL 3245910, *4 (E.D. N.Y. 2009) (following the SmithKline framework of preserving the "principal purpose" of two conflicting statutes and noting that SmithKline "also gave weight to the statute's priority of enactment in determining that the purposes of the earlier-enacted Copyright Act would not be undermined by the court's decision that the Hatch-Waxman Amendments took precedence over it").

[65] *See, e.g.*, Hawaii v. Trump, 859 F.3d 741, 778 (9th Cir. 2017)("[A] later-enacted, more specific statute generally governs over an earlier, more general one.").

Here, each one of these interpretive principles leads to the same result: CMS must interpret Section 1115 to harmonize with the FDCA and its accelerated approval provisions by not granting this waiver. The principal purpose of section 1115, which was initially enacted in 1965 and applies both to Medicaid and several other Social Security Act programs, is to enable states to "test out new ideas and ways of dealing with the problems of [program beneficiaries]."[66] Congress "intended that the Secretary would 'selectively approve[ ]' state projects" and "[t]he Secretary's own regulations and previous treatment of State projects, confirm that she has plenary authority to reject State projects and to require States to modify project to make them more consistent with federal requirements, less likely to harm recipients, and more likely to further the goals of the Social Security Act."[67] Thus, CMS has no obligation to grant a waiver that may harm beneficiaries who need new therapies and can deny the waiver without in any way sacrificing the goals of Section 1115; Congress undoubtedly never imagined Section 1115 even being used for such a purpose.

By contrast, the waiver at issue here would substantially impair FDA's ability to achieve the principal purposes of the FDCA's accelerated approval provisions. The waiver would impede FDA's ability to get innovative treatments to many of the patients with serious or life-threatening diseases who need these new options. Further, the FDCA's accelerated approval provisions were codified 50 years after Section 1115 and are at the heart of this waiver request for a closed formulary, while section 1115 addresses a broad range of projects under a wide range of Social Security Act programs. Accordingly, CMS must interpret Section 1115 in a way that avoids conflict with critical statutory provisions administered by FDA. Section 1115 cannot properly be interpreted as allowing a waiver jeopardizing FDA's ability to achieve the principal purposes of the FDCA's accelerated approval provisions.

Further, it would be arbitrary, capricious and an abuse of discretion to grant a waiver allowing a state to second-guess FDA approval decisions for the very purpose of deciding what drugs should be included in the rebate program. The rebate statute itself repeatedly demonstrates the enormous importance that Congress placed on the FDA approval process (including through its definitions of "covered outpatient drugs" and "medically accepted indication", both of which hinge partly on FDA approval decisions), and the courts also have repeatedly emphasized that other actors in the legal system may not properly second-guess FDA's expert drug-approval determinations -- including in the Medicaid context. For example, in K-V Pharmaceutical Co. v. Cook, the court enjoined a Georgia policy that resulted in non-coverage of a specific covered outpatient drug and rejected the State's argument that the compounded alternative was equally safe; the State's "position would render the FDA approval process meaningless," which the court was "unwilling" to do.[68] Numerous other cases have applied the same principle.[69] Here, this principle mandates that CMS reject Tennessee's attempt to substitute its own judgment for FDA's.

B. The Waiver Request Mischaracterizes the FDA Approval Standard

The proposal mischaracterizes the FDA approval standard, incorrectly suggesting that FDA approval of accelerated approval drugs occurs "prior to the release of the evidence on which the FDA's approval was based" and therefore, allows

---

[66] S. Rep. No. 1589, 87th Cong., 2d Sess. 20, *reprinted in* 1961 U.S.C.C.A.N. 1943, 1961.

[67] Beno v. Shalala, 30 F.3d 1057, 1069 (9th Cir. 1994) (citing S. Rep. No. 1589, 87th Cong., 1d Sess. 20).

[68] K-V Pharm. Co. v. Cook, No. 12-2491, 2012 WL 3715276, at *3 (N.D. Ga. Aug. 9, 2012).

[69] *See, e.g.*, D'Agostino v. ev3, Inc., 845 F.3d 1, 8 (1st Cir. 2016) (rejecting a rule that would "to turn the [False Claims Act] into a tool with which a jury of six people could retroactively eliminate the value of FDA approval and effectively require that a product largely be withdrawn from the market even when the FDA itself sees no reason to do so").

Tennessee to second-guess the FDA's approval—citing to a responsibility that new drugs are prescribed in a safe and effective manner that requires additional access restrictions as well as any "any special considerations" that pertain to specific TennCare populations.[70]

As an initial matter, there are no drugs approved by FDA without release of the information "on which the FDA's approval was based." This is the very function of the prescribing information or "labeling" approved along with all drugs. As FDA has explained, "[l]abeling accurately and objectively describes the basis for approval and how best to use the drug."[71]

Labeling includes information providing "adequate information for [the drug's] use, including indications, effects, dosages, routes, methods, and frequency and duration of administration, and any relevant hazards, contraindications, side effects, and precautions under which practitioners licensed by law to administer the drug can use the drug safely and for the purposes for which it is intended, including all purposes for which it is advertised or represented."[72] Of particular note, FDA-required labeling must include a section on "clinical studies," which "must discuss those clinical studies that facilitate an understanding of how to use the drug safely and effectively." This section of the FDA-required labeling "describe[s] the studies that support effectiveness for the labeled indication(s), including discussion of study design, population, endpoints, and results, but must not include an encyclopedic listing of all, or even most, studies performed as part of the product's clinical development program."[73] Thus, evidence on which the FDA's approval was based *is* available at the time of approval—through the FDA-required labeling—and so Tennessee's purported concern regarding lack of available information is misplaced.[74]

Finally, it is not clear from the waiver request that Tennessee understands the various expedited approval pathways available to FDA. This apparent misunderstanding undermines Tennessee's stated rationale for excluding certain drugs. For example, in responding to a comment on its proposal, it is unclear whether the State appreciates the difference between the accelerated approval pathway and "fast track" designation.[75] Accelerated approval and fast track are two separate expedited pathways, subject to different statutory standards.[76] We are concerned that Tennessee's failure to appropriately differentiate these two concepts underscores the State's flawed understanding of the FDA approval process, belying its rationale for excluding drugs approved via the accelerated approval pathway from formulary coverage.

Indeed, like the Massachusetts waiver request that CMS rejected, the Tennessee request seems rooted in a mischaracterization of FDA's accelerated approval as somehow a lesser approval standard. As noted above, however, the statutory provision governing accelerated approval explicitly states it does not "alter the standards of evidence" for drug

---

[70] TennCare II Demonstration Amendment 42 at 35.

[71] Step 4: FDA Drug Review, https://www.fda.gov/patients/drug-development-process/step-4-fda-drug-review (last modified Jan. 4, 2018).

[72] *See* 21 C.F.R. § 201.100(c)(1); *see also id.* § 201.57 (setting forth the content of format of FDA-required labeling).

[73] *See id.* § 201.57(c)(15).

[74] To the extent the waiver request is referring to FDA's "Summary Basis of Approval" (SBA) documents not being available at the time of approval, these documents are generally posted on FDA's Drugs@FDA database within two months of approval for all newly approved drugs, not solely drugs approved via the accelerated approval pathway. In any event, evidence on which FDA's approval was based is immediately available upon approval, as noted above.

[75] *See* TennCare II Demonstration Amendment 42 at 35. ("Other commenters objected to the suggestion that the State should need any opportunity to review these drugs at all, noting that the FDA is the world standard for drug review and approval, and that the FDA has determined that drugs approved through the fast track approval process are safe and meet an urgent and unmet need."). The waiver request refers to fast track as an "approval process." This, again, is inaccurate. Fast track is a *designation* that makes the drug eligible for expedited review.

[76] *See* 21 U.S.C. § 356(b) (setting forth the criteria for fast track designation); 21 U.S.C. § 356(b) (setting forth the criteria for accelerated approval).

approval, "including the substantial evidence standard."[77] FDA reiterates in guidance that "[d]rugs granted accelerated approval must meet the same statutory standards for safety and efficacy as those granted traditional approval."[78]

Moreover, like Massachusetts, Tennessee incorrectly suggests that approval based on reports of surrogate endpoints alone are suspect.[79] Surrogate endpoints are markers, such as laboratory measurements, radiographic images, physical signs or other measures thought to predict clinical benefit.[80] They are scientifically recognized measures accepted by FDA and Congress and must be supported by extensive scientific data to support FDA approval. As FDA has stated, "[b]efore a [surrogate endpoint] can be accepted in place of a clinical outcome, there must be extensive evidence showing that it can be relied upon to predict, or correlated with clinical endpoint."[81] Surrogate endpoints have served as primary endpoints supporting the approval, whether accelerated or traditional approval, of life-saving medicines.[82] For example, HIV therapies have received accelerated approval on the basis of short-term suppression of HIV viral load in plasma. Furthermore, some HIV therapies may be submitted for traditional approval based on such short-term viral load suppression, as noted above. Additionally, radiographic evidence of tumor shrinkage (i.e., response rate) is a surrogate endpoint that FDA has determined to be reasonably likely to predict an improvement in overall survival in cancer patients.[83] Certainly, Tennessee cannot intend to exclude such drugs from coverage.

In summary, like the previously rejected Massachusetts waiver, the Tennessee waiver request is based on a flawed understanding of federal law and the FDA approval process, is contrary to science-based decision making, and seeks to supplant the expert opinion of the FDA and an individual patient's treating physician. The waiver request would restrict patient access to novel FDA-approved therapies for populations most desperately needing treatment—by restricting access to drugs that FDA determined to be safe and effective and deserving of accelerated approval because they are intended for treatment of "serious or life-threatening disease[s] or condition[s]," including areas of unmet medical needs.[84]

III. CMS Should Continue to Enforce Key Managed Care Rules that Ensure Beneficiaries' Access to Drugs

Although Tennessee's proposal states that "outpatient prescription drugs" will be excluded from the calculation of the proposed block grant, PhRMA's understanding from informal discussions with State representatives is that Tennessee *does* plan to include certain drugs in the block grant (specifically, drugs that are reimbursed directly by the managed care organizations (MCOs) as part of a medical claim, as opposed to drugs that are reimbursed through the State's pharmacy benefit manager as part of a pharmacy claim). In light of this possibility, PhRMA has evaluated the proposed block grant

---

[77] *Id.* § 356(e)(2).

[78] *See* FDA, Guidance for Industry, Expedited Programs for Serious Conditions – Drugs and Biologics at 19 (May 2014).

[79] While the waiver request appears to limit the proposed exclusion to drugs approved under the accelerated approval pathway, it should be noted that FDA approves drugs under the traditional approval pathway based on surrogate endpoints. *See, e.g.*, FDA, Adult Surrogate Endpoint Table, https://www.fda.gov/drugs/development-resources/table-surrogate-endpoints-were-basis-drug-approval-or-licensure (identifying over 50 drugs approved on the basis of surrogate endpoints through the "traditional" approval pathway). Accordingly, Tennessee's purported concern with respect to drugs approved on the basis of "surrogate endpoints" is misplaced.

[80] *See*, FDA, Guidance for Industry, Expedited Programs for Serious Conditions – Drugs and Biologics at 17–18 (May 2014).

[81] *See* FDA, SBIA Chronicles, FDA Facilitites the Use of Surrogate Endpoints in Drug Development (Nov. 2018), https://www.fda.gov/media/119152/download.

[82] *See, e.g.*, 21 U.S.C. 357(c)(1)(E)(ii) (directing FDA to publish a list of "all surrogate endpoints which were the basis of approval or licensure…of a drug or biological product.").

[83] *Id.*

[84] *Id.* § 356(c)(1)(A).

provisions carefully and identified a potentially serious concern with Tennessee's request to modify the federal managed care rules.

Tennessee is requesting CMS approval to "[o]perate a managed care program that does not comply with the requirements of 42 CFR Part 438."[85] The proposal lists "[e]xamples of unnecessary federal requirements" in Part 438, all of which pertain to procedural obligations.[86] The written proposal does not, however, provide a comprehensive list of the elements in Part 438 that Tennessee seeks to omit, retain, or modify.

In this section, we describe two crucial managed care rules that pertain to drug coverage and reimbursement: the requirement that states' MCO contracts comply with the coverage obligations in the Medicaid rebate statute,[87] and the rule prohibiting duplicative discounts under the rebate statute and the 340B Drug Pricing Program.[88] While Tennessee has not requested to modify either of these rules specifically, we urge CMS to ensure that these rules continue to apply to TennCare MCOs, irrespective of any other approved modifications to the federal managed care regulatory standards. Any change to these drug-related rules —and others governing key beneficiary protections for access to care—would have major consequences for Medicaid beneficiaries in any state, and all the more so in Tennessee, which is "one of only 2 states to enroll every Medicaid enrollee in an MCO."[89] These changes would fail to promote Medicaid objectives or meaningfully test new ideas, as described above, and so should not be approved.[90]

A. CMS Should Ensure that Managed Care Entities Continue to Abide by the Rebate Statute's Drug Coverage Standards

Since 2010, the Medicaid rebate statute has required that drug manufacturers pay Medicaid rebates on covered outpatient drugs dispensed or administered to Medicaid MCO enrollees. CMS, in turn, added provisions to the Medicaid managed care regulations requiring that Medicaid MCOs follow the rebate statute's coverage standards "as if such standards applied directly to [Medicaid MCOs]." Specifically, 42 CFR § 438.3(s)(1)—part of § 438.3(s) on "requirements for MCOs [and other managed care entities] that provide covered outpatient drugs"—provides that:

> Contracts that obligate MCOs, PIHPs or PAHPs to provide coverage of covered outpatient drugs must include the following requirements:
>
> (1) The MCO, PIHP or PAHP provides coverage of covered outpatient drugs...that meets the standards for such coverage imposed by section 1927 of the Act [the Medicaid rebate statute] as if such standards applied directly to the MCO, PIHP, or PAHP." (Emphasis added.)

---

[85] TennCare II Demonstration Amendment 42 at 25.

[86] *Id.* at 20.

[87] *See* 42 C.F.R. § 438.3(s).

[88] *See id.* § 483.3(s)(3).

[89] The Sycamore Institute, Understanding Medicaid and TennCare, Key Concepts and Context to Know (June 1, 2017).

[90] Tennessee appears to be requesting a modification of Part 438 pursuant to the Secretary's so-called "expenditure authority" under SSA § 1115(a)(2). *See* TennCare II Demonstration Amendment 42 at 25. That authority is, however, subject to the same governing standards as SSA § 1115(a)(1) in that the project must be an experimental, pilot, or demonstration project that is likely to assist in promoting the objectives of the Medicaid program. We note, moreover, that any request to waive the drug-related managed care rules under 1115(a)(1) would be subject to additional legal defects, given that certain drug-related MCO regulations arise out of statutes that are not waivable under that authority.

If a state were permitted to opt out of this MCO regulation, uncertainty could exist regarding the applicability of the Medicaid rebate statute's coverage standards with respect to drugs included in the block grant.[91] As a consequence, access to drugs included in the block grant could be at risk for all of Tennessee's Medicaid population,[92] which could lead to critical disruptions in health care and attendant declines in health outcomes for Tennessee's Medicaid beneficiaries.

Accordingly, we urge CMS not to grant authority to authorize Medicaid spending for Medicaid MCOs that does not follow the rebate statute's coverage standards. For a number of reasons detailed in Section I, such authority would not be consistent with Section 1115, Section 1927 (the rebate statute), the objectives of the Medicaid statute, or sound health care policy. As we also explain in Section I.A., any disruption in access to drugs—perhaps especially a decline in access to physician-administered drugs commonly used to treat life-threatening and otherwise very serious diseases, such as cancer—could also have unintended adverse consequences for Tennessee and the federal government from a fiscal perspective, by aggravating TennCare beneficiaries' health problems and ultimately causing an overall increase in Medicaid spending.

B. CMS Should Not Approve Modifying or Omitting MCO Regulations Implementing the Medicaid MCO/340BDuplicate Discounts Prohibition

The Medicaid managed care regulations also establish the only federal requirements to prevent illegal Medicaid MCO/340B duplicate discounts.[93] The Medicaid rebate statute provides in Section 1927(j)(1)) that it does not apply to 340B drugs dispensed by a Medicaid MCO, and SSA Section 1903(m) requires that Medicaid MCOs report their drug utilization data—excluding utilization data for 340B drugs—to the state so that the state can bill manufacturers for Medicaid rebates. Therefore, under 1903(m), Medicaid MCOs must identify 340B drugs and exclude them from their reporting to the state, to prevent illegal Medicaid/340B double discounts in the managed care environment. Specifically, under SSA § 1903(m)(2)(A)(xiii)(III) states' contracts with a Medicaid MCO must require that:

> (III) the entity [the MCO] shall report to the State, on such timely and periodic basis as specified by the Secretary in order to include in the information submitted by the State to a manufacturer and the Secretary under section 1927(b)(2)(A) of this title, information on the total number of units of each [11-digit NDC] of each covered outpatient drug dispensed to [MCO enrollees] and for which the [MCO] is responsible for coverage of such drug under this subsection (other than covered outpatient drugs that under subsection (j)(1) of section 1927 of this title are not subject to the requirements of that subsection.) (Emphasis added.)

---

[91] We assume that Tennessee's request for waiver of 42 CFR Part 438 only applies to those items and services that Tennessee would include in the block grant (although the proposed amendment does not say that explicitly).

[92] As discussed earlier. we believe the rebate statute is properly interpreted as requiring Medicaid MCOs to follow its coverage standards now that its rebate requirements apply to Medicaid MCO utilization, but to date CMS has not adopted that interpretation.

[93] To date, HRSA has not issued any guidance requiring section 340B covered entities to take steps to prevent Medicaid/340B discounts that involve Medicaid MCO utilization; HRSA's current guidance instead provides that its duplicate discount prevention mechanism applies only to Medicaid fee-for-service utilization.

CMS has issued regulations to enforce Section 1903(m)(2)(A)(xiii)(III), which appear in 42 CFR Part 438. Specifically, 42 CFR § 438.3(s)(3) requires that states include provisions in their contracts with Medicaid MCOs requiring the MCO to "establish[ ] procedures to exclude utilization data for covered outpatient drugs that are subject to discounts under the 340B drug pricing program from the reports required under paragraph (s)(2) of this section [concerning reports of quarterly MCO drug utilization data that states use to bill manufacturers for Medicaid rebates]." (Emphasis added). In adopting this regulation, CMS explained:

> When states contract with managed care plans, the contracts should include specific language addressing which tools managed care plans can use to exclude 340B purchased drugs from utilization [data], the responsibility the MCO has with resolving manufacturer disputes of rebate invoices derived from MCOs, [the] state's ability to access data and records related to the MCO's exclusion of 340B purchased drugs from utilization reports, and any liability the MCO may face in cases of unresolved manufacturer disputes of rebate invoices derived from the MCO's utilization.[94]

Accordingly, granting Tennessee the authority to disregard these provisions would eliminate the sole federal regulatory barrier designed to prevent illegal Medicaid MCO/340B duplicate discounts. Congress clearly did not intend for states to claim duplicate discounts and CMS should not grant Tennessee authority to disregard this prohibition as it applies to managed care.

IV. Tennessee's Proposal Lacks Sufficient Detail to Provide a Meaningful Opportunity for Public Comment

Following years of concern about the opacity of Section 1115 demonstration approvals, the Affordable Care Act amended Section 1115 to require greater transparency and opportunity for public comment relating to proposed demonstrations that would affect "eligibility, enrollment, benefits, cost-sharing, or financing."[95] Pursuant to this mandate, CMS issued regulations requiring a public notice and comment process at the state and federal levels.[96] In accordance with those regulations, Tennessee released a draft of Amendment 42 for public comments at the state level before submitting its proposal to CMS. PhRMA submitted a comment letter that, like many others, expressed concern at the lack of detail in Tennessee's proposal. The State made a few modest revisions before submitting the proposal to CMS, but failed to address many of the gaps we and other commenters identified in the original draft. Even in its revised form, the proposal leaves out crucial details, and thus fails to satisfy the requirement for a "comprehensive description of the demonstration application or extension…that contains a sufficient level of detail to ensure meaningful input from the public."[97]

In several important areas, Tennessee has provided only vague outlines of its proposed policies. These rough sketches are insufficient for the public to understand the State's intentions or to provide "meaningful input" on the proposal's risks and benefits. A decision by CMS to approve an underspecified feature may, moreover, suffer from an inadequate administrative record, thereby creating a second type of legal risk. Under the Administrative Procedure Act, an agency action

---

[94] 81 Fed. Reg. 27498, 27547 (May 6, 2016).

[95] SSA § 1115(d)(1).

[96] 42 C.F.R. § 431.408.

[97] *Id.* § 431.408(a)(i) (emphases added).

may be set aside as arbitrary and capricious if a court is unable to conclude that "the evidence *in the administrative record* permitted the agency to make the decision it did."[98]

The following are only some of the many examples of underspecified proposal elements:

- Tennessee has provided little to no detail regarding the standards it will apply in defining the closed formulary or in assessing new drugs approved under the accelerated pathway. The proposal suggests that Tennessee intends to base these assessments in large part on drug price and cost-effectiveness, but does not explain how the State intends to define or weigh these new metrics. Any such proposal is impermissible under Section 1115, as noted above, because it fails to advance Medicaid objectives and severs the legislative coverage compromise under Section 1927. In addition, however, the proposal's lack of detail leaves stakeholders unable to provide meaningful comment on shortcomings in the many potential cost-based assessment frameworks that Tennessee might seek to apply. Without meaningful public comment, the State risks enacting policies with severe unintended consequences for beneficiary health.

- The proposal refers at various points to "prescription drugs" or "outpatient prescription drugs." The State neglected to define either of these key terms in the written proposal, and we have received inconsistent definitions informally about how these terms will be applied.

    - We assume that the State's proposal for a closed formulary relates specifically to "covered outpatient drugs," as defined in Section 1927(k)(2), and not to the other types of "prescription drugs" (*e.g.*, those administered in a hospital or physician office) that are covered in the Medicaid program. If the State is considering a closed formulary for a set of drugs that is different than Section 1927(k)(2)'s "covered outpatient drugs," the State should release a revised proposal explaining which types of drugs it intends to cover or exclude in such formulary and why it is deviating from this statutory definition.

    - Tennessee's written proposal describes a block grant model that would exclude all costs associated with "outpatient prescription drugs."[99] Based on informal discussions with State officials, however, we are concerned that Tennessee may seek to include certain types of outpatient drugs under the block grant limit, such as those that are administered by physicians or other health care professionals in hospital outpatient clinics. This would shift the financing structure for crucial innovative therapies for cancer and a range of other conditions, potentially resulting in restricted patient access. Adding to the confusion, some drugs may be payable under either a pharmacy or a medical claim (which the State has mentioned as one possible way to distinguish drugs in/out of the block grant). Before seeking CMS approval for any such proposal, the State must unequivocally declare its intentions so that members of the public—including health care providers, patient advocacy groups, and pharmaceutical manufacturers—can assess the potential risks and benefits of including drugs in the block grant. As described in this comment letter, it is unclear whether and how the State would apply other Section 1927 protections to any drugs paid by MCOs that are included in the block grant.

- We note, in addition, the State's expressed openness to "incorporating its prescription drug benefit into the [proposed] block grant financing system in the future" if CMS approves the State's requested "formulary

---

[98] Philbrick v. Azar, 397 F. Supp. 3d 11, 20 (D.D.C. 2019).

[99] TennCare II Demonstration Amendment 42 at 12.

management tools."[100] Tennessee's waiver request for a closed formulary is not permitted under Section 1115, as noted above. Bringing a closed formulary under the block grant financing system would not correct any of the legal defects described in this letter. Any such change would, moreover, require a separate formal public comment period, as the brief reference in the current proposal is insufficient grounds upon which to implement such a radical change, either in this waiver request or in a future modification to the waiver. As drafted, this glancing reference does not afford stakeholders enough information to assess and comment on the risk that altering the drug benefit's financing structure would restrict beneficiaries' access to essential medications.

- With respect to both the proposed closed formulary and the proposed block grant financing model, Tennessee has not indicated in its proposal if it intends for Section 1927 rebates to remain applicable to drug utilization. It does not appear, however, that the State seeks to implement a closed formulary by constructing a new drug benefit out of whole cloth under the Section 1115(a)(2) expenditure authority *without* the mandatory rebates. As discussed above, any proposal along those lines would need to lay out for public comment essential details relating to, for example, manufacturer rebate obligations, formulary restrictions, and what, if any, beneficiary protections apply. In the absence of any such new authority under Section 1115(a)(2), which the State has not specifically requested, Section 1927 therefore applies unless it is explicitly waived under Section 1115(a)(1), including both the coverage mandate and the other beneficiary protections; as explained above, Tennessee's requested waiver of 1927 is impermissible and would harm beneficiaries.

- Tennessee is requesting CMS approval to "[o]perate a managed care program that does not comply with the requirements of 42 CFR Part 438," and includes a non-exhaustive list of examples of procedural requirements that the State seeks to modify.[101] Nowhere in this list does Tennessee request to modify either the federal managed care drug coverage regulation or the rule that operationalizes Congress's prohibition on duplicate discounts between rebates on Medicaid MCO drug utilization and 340B drugs. We do not read Tennessee's proposal as seeking modifications of these requirements at this time, but there is some ambiguity. Any such intent or change in such direction would need to be articulated clearly in a reissued proposal so as to provide an opportunity for public comment, given the impact such modified requirements would have on beneficiaries.

With respect to each of these elements, Tennessee's proposal does not contain a "comprehensive program description of the demonstration," as required under CMS's rules.[102] If Tennessee would like to move forward with any of these details, we believe the State would need to release a revised proposal and begin another round of public notice and comment at the State level.

V. State Flexibility to Control Costs Already Exists under the Medicaid Drug Rebate Statute

If Tennessee seeks increased leverage to negotiate higher rebates from manufacturers, it should use the cost containment tools available under the rebate statute before taking drastic action to remove drugs from coverage. In exchange for guaranteed rebates, state Medicaid programs generally must cover outpatient drugs of manufacturers with a Medicaid rebate agreement, but may use numerous cost containment tools to restrict access and encourage cost-effective use of medicines within the Medicaid program. Tennessee's existing use of cost containment tools already provides significant savings in its Medicaid drug spending. Medicaid prescription drug spending in Tennessee is 4.4 percent of the State's total

---

[100] *Id.* at 16.

[101] *Id.* at 25.

[102] 42 C.F.R. § 431.412.

Medicaid spending, due in part to the rebates and other cost containment tools Tennessee already has in place.[103] Medicaid rebates in FY2018 amounted to 60 percent of total TennCare pharmacy spending.[104]

Tennessee already possesses authority to establish a formulary under the Medicaid rebate statute and the State's existing TennCare waiver. But the new waiver request proposes a "closed formulary" that would exclude a wide range of drugs without making the clinical determinations required under the rebate statute, thus violating formulary safeguards established by Congress to protect patients. This is far more extreme than what Tennessee or any other state has done with the overall drug benefit for Medicaid beneficiaries.

The cost containment tools that are already available to states under Section 1927 include the following:

- States may impose prior authorization requirements on any drug, provided the state responds to prior authorization requests within 24 hours and dispenses a 72-hour supply of the requested drug in an emergency;[105]

- States may exclude or restrict coverage of any drug that is not prescribed for a "medically accepted indication" (defined as FDA-approved indications plus off-label uses supported by specified compendia);[106]

- States may impose restrictions authorized by an agreement with the drug manufacturer;[107]

- States may exclude or restrict coverage of any drug used for certain listed purposes (*e.g.*, anorexia, weight loss, weight gain, to promote fertility, for cosmetic purposes, etc.);[108]

- States may create Medicaid formularies and exclude a drug from a Medicaid formulary if: (a) the drug's labeling or certain compendia establish that the drug "does not have a significant, clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcome" over a drug included on the formulary, (b) there is a publicly-available written explanation of the basis for the exclusion, (c) the excluded drug is available with prior authorization, and (d) certain additional requirements relating to the committee that develops the formulary are satisfied;[109]

- States "may impose limitations, with respect to all…drugs in a therapeutic class, on the minimum or maximum quantity per prescription or on the number of refills, if…necessary to discourage waste, and may address instances of fraud or abuse by individuals in any manner authorized under [the Medicaid statute];"[110]

---

[103] PhRMA, The Facts About Medicaid in Tennessee, available at: https://www.phrma.org/-/media/Project/PhRMA/PhRMA-Org/PhRMA-Org/PDF/PhRMA_State_Fact_Sheet_Tennessee1.pdf.

[104] *Id.*

[105] SSA § 1927(d)(1)(A),(5).

[106] SSA § 1927(d)(1)(B)(i).

[107] SSA § 1927(d)(1)B)(iii).

[108] SSA § 1927(d)(1)(B)(ii),(2).

[109] SSA § 1927(d)(4).

[110] SSA § 1927(d)(6).

and

- States may create Preferred Drug Lists (PDLs), which are lists of drugs that are not subject to prior authorization and are not "formularies" that must satisfy the rebate statute's requirements for formularies and may demand supplemental rebates as the price for including a drug on the PDL.[111]

The leverage provided to states by these measures is so great that as of June 2019, 47 states (including Tennessee) and the District of Columbia had supplemental rebate programs which allowed them to collect extra rebates above and beyond the large rebates already required under the federal rebate statute.[112]

States also are permitted to enter into voluntary, value-based payment arrangements for Medicaid drug purchasing. Value-based arrangements can improve patient outcomes, reduce medical costs, and reduce the cost of medicines. These arrangements can improve patient access to medicines while supporting better health outcomes and reducing hospitalizations and other medical costs. Value-based contracting arrangements should be tailored carefully to address the medication involved and the patients and disease conditions they seek to treat. In a document accompanying the revised waiver request, Tennessee noted its desire to "pursue alternative payment arrangements" for certain drugs.[113] Such arrangements are possible, however, even without an amendment to the current TennCare waiver. Voluntary, value-based contracting arrangements have already been explored in other states like Colorado, Michigan, and Washington, and are currently being implemented in Oklahoma. Value-based agreements for Medicaid patients must be voluntary, however, given a statutory minimum rebate is already in place. In other words, the arrangements must be structured as a supplemental rebate agreement. Voluntary, value-based agreements could include:

- Outcomes-based arrangements, which tie costs or discounts to patient outcomes;
- Conditional treatment continuation arrangements, which typically are conditioned on meeting short-term treatment goals;
- Indication-based pricing arrangements, where the net price varies based on the indication for treatment;
- Regimen-based pricing arrangements, where the net price of a medicine decreases when a patient must take additional medication to make the treatment more effective; and
- Expenditure cap arrangements, which limit the cost of medicine per patient to a negotiated threshold.

The availability of a wide array of alternative cost containment mechanisms, many of which are being explored in other states, demonstrates that Tennessee's proposed formulary is unnecessarily harmful to patients.

***

---

[111] PhRMA v. Meadows, 304 F.3d 1197 (11th Cir. 2002); PhRMA v. Thompson, 362 F.3d 817, 823-24 (D.C. Cir. 2004).

[112] Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services, 2019. Medicaid Pharmacy Supplemental Rebate Agreements (as of June 2019), available at: https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/xxxsupplemental-rebates-chart-current-qtr.pdf

[113] Tennessee Medicaid Block Grant Proposal Misunderstandings & Clarifying Facts, https://www.tn.gov/content/dam/tn/tenncare/documents2/Amendment42MisunderstandingsClarifyingFacts.pdf.

We believe that the significant substantive and procedural defects described above make key aspects of Tennessee's waiver amendment proposal ineligible for approval under Section 1115. Approving any of the proposal elements highlighted in our comments would needlessly endanger TennCare patients who are dependent upon the program for prescription drug access.

The proposal seeks to impose a closed formulary on TennCare drug coverage without waiving Medicaid drug rebate access; seeks to presumptively exclude FDA accelerated approval drugs, thereby misconstruing the FDCA and violating the requirements of the Medicaid statute; seeks to implement these and additional, unspecified changes on a permanent basis without any amount of continuing oversight by CMS; fails to demonstrate how these proposed measures will serve as a "test" or "demonstration" or how they will advance the objectives of the Medicaid program; and fails to provide sufficient detail to allow for meaningful public participation in the waiver process. For all of these reasons, we urge CMS to refrain from approving the requested authorities. At a minimum, additional information is needed in order for CMS to assess the State's proposal. Moreover, while we appreciate Tennessee's need to ensure that TennCare is sustainably financed, there are alternative cost control mechanisms that are allowable under Section 1115 and that help achieve the same goals without placing the health of TennCare patients at risk.

There is ample evidence in peer-reviewed literature to demonstrate the negative effects of many common commercial tools applied to manage prescription drug access. Closed formularies and other commercial tools can harm Medicaid patients by limiting patient-centered care and prescription drug access, resulting in lower medication adherence, inferior health outcomes, and higher overall costs for Medicaid as a whole.

We understand that states face a considerable challenge in ensuring residents have access to quality, affordable health care. PhRMA remains committed to ensuring accessibility to needed medicines for Medicaid beneficiaries so that every patient, in consultation with his or her physician, has access to therapies that can improve their quality of life.

Thank you for the opportunity to comment on this important matter. We welcome the opportunity to continue this conversation with CMS. Please contact Sylvia Yu at (202) 835-3496 or Courtney Christian (202) 835-3541 if you have any questions related to this issue.

Sincerely,

Sylvia Yu
Vice President, Law

Courtney Christian
Director, Policy and Research

Attachment A: Research on Closed Formularies and Other Widely Used Commercial Tools Used to Manage Prescription Drug Access

- The portion of the peer-reviewed literature in health care services research that examines the impact of tools to manage prescription access, such as drug cost-sharing programs, closed formularies, preferred drug lists, prior authorization, and other tools, has grown in the past decade or so. Some recent studies have focused on the impact of closed formularies on health outcomes for Medicaid beneficiaries. This body of work, conducted by a wide-range of researchers and published in diverse peer-reviewed journals, has contributed three broad, evidence-based conclusions to our knowledge base:

  - Closed formularies and similar commercial tools used to manage prescription drug use or access can do harm to patients by limiting patient-centric care if thoughtful safeguards are not established in advance. A review of multiple studies finds that the use of commercial tools to manage access to prescription medications can do harm to patients by limiting patient-centric care, reducing medication adherence, and contributing to poorer patient outcomes.

  - Initiatives that put limits on prescription drug access lead to lower medication adherence among diverse populations of Medicaid beneficiaries, particularly those with serious chronic medical conditions. Lower adherence is associated with worsening health outcomes, a greater likelihood of acute health care events, and increased utilization of expensive health care services such as emergency department visits and hospitalizations. Several studies indicate that increased health care utilization from visits and hospitalizations results in higher total health care costs.

  - Closed formularies and other similar commercial tools are not guaranteed to lower total health care costs at the population level. Many studies find that total health care costs rise after the implementation of these commercial tools, particularly for Medicaid beneficiaries with chronic medical conditions such as cardiovascular disease, schizophrenia, and depression.

EVIDENCE THAT CLOSED FORMULARIES CAN DO HARM TO PATIENTS

- Recent research has concluded that patient-centric care, which allows for a multidisciplinary team to provide customized treatments and approaches for patient care, is beneficial for Medicaid beneficiaries.[i,ii] Closed formularies and other commercial tools may restrict patient-centric care.

- Closed formularies can inhibit individualized patient care by limiting access to a drug or multiple drugs needed to effectively treat or manage patients' conditions. More specifically, closed formularies can impact the treatment-matching process, clinical decisions, and recommendations for patients with schizophrenia and other mental health disorders.[iii] For example, multiple studies have demonstrated that patients with depression who fail to respond to first-line treatment will achieve a clinically meaningful response when switched to another drug in the same class.[iv,v,vi] Other studies have shown that new formulations of HIV medicines that combine up to four medicines with different mechanisms have increased adherence and worked to avoid drug resistance.[vii,viii,ix] Such combination therapies may be in jeopardy under a closed formulary or other restrictions placed by proposed prescription drug initiatives by the TennCare1115 Amendment.

- Research has concluded that commercial tools used to manage drug access or use, such as closed formularies, adversely impact patient health outcomes, doing harm to patients, and in many cases, prolonging their recovery periods. For example, research indicates that patients with schizophrenia subject to formulary restrictions are more likely to be hospitalized.[x] Likewise, for patients with bipolar disorder, those subject to formulary restrictions are also more likely to experience a hospitalization, incur higher inpatient costs, and incur higher total health care costs.[xi] A review of more than 150 peer-reviewed research articles on the impacts of increased prescription drug cost sharing—a likely consequence of any closed formulary policy—concludes that there is a strong relationship among cost sharing, lower adherence, and poorer patient outcomes.[xii] Similarly, other research finds that restricting access to prescription medications adversely affects Medicare beneficiaries' health, including an association with higher blood pressure and cholesterol levels.[xiii]

RESTRICTIONS ON THE USE OF PRESCRIPTION DRUGS LOWER ADHERENCE TO MEDICATION PROTOCOLS

- Commercial tools that limit prescriptions drug access or manage the use of medications, through higher co-payments or limited approved medication lists, often result in higher out of pocket costs. As a result of the higher cost burden, patients often experience lower medication adherence (such as decreased drug use or longer gaps in treatment) which is closely related to poorer health outcomes among the same patients.

- A patient's ability to follow a clinician's advice on how to take prescribed medications, commonly known as drug adherence, plays an important role in determining a patient's health outcomes, risk of hospital admission and readmission, and total health care costs (out of pocket and state paid).[xiv,xv,xvi,xvii,xviii,xix] Research has linked the use of commercial tools that limit prescription drug access to decreased utilization of medications and the discontinuation of therapy among Medicaid beneficiaries with schizophrenia and bipolar disorder.[xx] Similarly, patients with continuous use of antidepressant drugs are less likely to relapse than patients who discontinue treatment.[xxi]

- Research indicates that commercial tools that have the goal of reducing overall prescription drug costs also impose higher out-of-pocket costs on patients, and this leads directly to lower medication adherence. A review of data from several states that use commercial tools in Medicaid revealed that higher prescription drug copayments were associated with an increase in the incidence of hypercholesterolemia and hypertension, decreased adherence for high cholesterol medications in uncontrolled hypertension and hypercholesterolemia patients, and reduced drug utilization for hypercholesterolemia.[xxii] After Mississippi's Medicaid program increased prescription copayments, Medicaid patients with antipsychotic treatments experienced longer gaps in treatment than patients in states without copayments.[xxiii] Furthermore, North Carolina Medicaid beneficiaries who were compliant with treatment plans experienced a decline in adherence after the State implemented copayments and other commercial tools for Medicaid beneficiaries.[xxiv] Another study found that after copayments were imposed on cancer patients, the number of days of supply of prescription drugs—a proxy for medication adherence—decreased in the State that imposed copayments compared with the experience of similar Medicaid beneficiaries in states that did not impose copayments for cancer medications.[xxv]

- Recent studies focusing on Medicaid-enrolled children show a strong relationship between access to medications and improved adherence. Several studies reveal that Medicaid-enrolled children who are able to

fill prescriptions for asthma medications experience fewer hospital readmissions and utilize less acute care than children who cannot fill the same prescriptions to manage their asthma.[xxvi,xxvii,xxviii] As a result, research shows that increased access to asthma medications for Medicaid-enrolled children leads to lower overall Medicaid costs attributable to their healthcare.[xxix]

- Evidence in commercially-insured populations indicates that stringent incentive-base formularies can result in patients stopping the use of their medications entirely.[xxx] That most individuals who have commercial insurance, generally, are more well-educated, have more stable housing, and fewer socioeconomic concerns than individuals covered by Medicaid makes this evidence particularly concerning. Without proper controls in place, Medicaid formularies might have an even greater detrimental effect than those in some commercial plans.

RESTRICTIONS ON PRESCRIPTION DRUG ACCESS DO NOT GUARANTEE LOWER HEALTH CARE COSTS

- A primary goal of the 1115 waiver amendment is to lower total health care cost; however, numerous studies show that limiting prescription drug access through commercial tools results in higher total health care costs.

- Any potential savings resulting from anticipated rebates, above and beyond the existing best-price rebates Medicaid enjoys, under a closed formulary may be more than offset by additional future health care costs. Research has established that prescription medication cost-sharing arrangements result in decreased use of prescription medications and that medication nonadherence is associated with higher health care costs. Several studies examining low drug adherence among Medicaid beneficiaries suffering from various conditions, including cardiovascular disease and cancer, show higher costs associated with increased hospitalizations and emergency department visits.[xxxi,xxxii,xxxiii] Similarly, a study on the adoption of copayments in Oregon's Medicaid program showed no reduced net costs as decreased pharmacy expenditures were negated by increased inpatient hospital costs and outpatient services as a result of lower adherence.[xxxiv] Conversely, studies have also demonstrated lower health care utilization associated with higher adherence among Medicaid patients with sickle cell disease, mental health conditions, and nine other chronic health conditions compared to those with lower adherence.[xxxv,xxxvi,xxxvii] Other research indicates that an increase in drug utilization among Medicaid beneficiaries is associated with a decrease in Medicaid spending for blind or disabled adults, other adults, and children.[xxxviii]

- Lower adherence has been shown to increase hospitalization and emergency department costs in Medicaid-enrolled child beneficiaries. Nonadherence in child lupus patients was associated with more than 50 percent increase in emergency department use and nearly 40 percent increase in hospitalizations.[xxxix] Separate studies examining asthma-related hospitalizations and anti- inflammatory medication adherence among children produced analogous results.[xl,xli]

- Research also concludes that the financial burden to states may be even higher if states forgo additional rebates from manufacturers for branded medications because of restrictive formulary policies, or if the policies generate significant administrative costs.[xlii] Formulary restrictions are not associated with significantly lower pharmacy expenditures.[xliii]

- Research shows that reduced adherence from closed formularies has detrimental costs on society, including an increase in incarceration and increase in associated costs. One study showed that patients from 10 states with medication access problems had a more than 3 times greater likelihood of adverse events such as homelessness, suicidal behavior, and incarceration.[xliv] A similar study demonstrated that prior authorization requirements for atypical antipsychotics designed to reduce health care costs are associated with greater prevalence of mental illness within the criminal justice system.[xlv] Other work suggests that restrictive formulary policies in Medicaid may have increased the number of prisoners and incarceration costs nationwide in 2008.[xlvi]

PLANNED EVALUATION OF THE PROPOSED 1115 AMENDMENT INITIATIVES FOR PRESCRIPTION DRUGS IS NOT SUFFICIENTLY COMPREHENSIVE

- The plan for the evaluation of the waiver's initiatives for prescription drugs is not comprehensive, will not assess their full impact on Medicaid beneficiaries or the TennCare program, and will not enable us to learn anything new about the association between prescription medication policies and drug and health care utilization.

- As described above, there are well-established links between increased cost sharing and medication adherence for Medicaid beneficiaries as well as medication adherence and total health care expenditures. Similar academic evaluations on cost sharing initiatives have incorporated the use of randomized trial,[xlvii] pre-study and post-study cohort studies that examined adverse health events,[xlviii] class review[xlix] and other study designs, in addition to the evaluation of health care expenditures.

---

[i] Smith, M, Giuliano, MR, Starkowski, MP. (2011). In Connecticut: Improving patient medication management in primary care. *Health Affairs 30*(4), 646–654. doi: 10.1377/hlthaff.2011.0002. Available at http://content.healthaffairs.org/content/30/4/646.full.pdf+html

[ii] Maizes, V, Rakel, D, Niemiec, C. (2009, September–October). Integrative medicine and patient-centered care. *The Journal of Science and Healing 5*(5), 277–289. Available at http://www.sciencedirect.com/science/article/pii/S1550830709002341

[iii] Huskamp, HA. (2003). Managing psychotropic drug costs: Will formularies work? *Health Affairs 22*(5), 84–96. doi: 10.1377/hlthaff.22.5.84. Available at http://content.healthaffairs.org/content/22/5/84

[iv] Thase, ME1, Feighner, JP, Lydiard, RB. (2001). Citalopram treatment of fluoxetine nonresponders. *J Clin Psychiatry 62*, 683– 687.

[iv] Bauer, M, Hellweg, R, Baumgartner, A. (1996). Fluoxetine-induced akathisia does not reappear after switch to paroxetine. *J Clin Psychiatry 57*(12), 593–594.

[v] Ibid.

[vi] Mullins, CD, Shaya, FT, Meng, F, Wang, J, Harrison, D. (2005). Persistence, switching, and discontinuation rates among patients receiving sertraline, paroxetine, and citalopram. *Pharmacotherapy 25*, 660–667

[vii] Ickovics, JR, Cameron, A, Zakin, R, Bassett, R, Chesney, M, Johnson, VA, … Adult AIDS Clinical Trials Group 370 Protocol Team. (2002). Consequences and determinants of adherence to antiretroviral medication: Results from Adult AIDS Clinical Trials Group protocol 370. *Antivir Ther 7*, 185. Available at http://www.ncbi.nlm.nih.gov/pubmed/12487386

[viii] Bangsberg, DR, Ragland, K, Monk, A, Deeks, SG. (2010). A single tablet regimen is associated with higher adherence and viral suppression than multiple tablet regimens in HIV+ homeless and marginally housed people. *AIDS 24*(18), 2835–2840.

[ix] Nachega, JB, Parienti, JJ, Uthman, OA, Gross, R, Dowdy, DW, Sax, PE, …Giordano, TP. (2014). Lower pill burden and once-daily dosing antiretroviral treatment regimens for HIV infection: A meta-analysis of randomized controlled trials. *Clin Infect Dis, 58*, 1297–1307.

[x] Goldman, D, Fastenau, J, Dirani, R, Helland, E, Joyce, G, Conrad, R, Lakdawalla, D. (2014). *Medicaid prior authorization policies and imprisonment among schizophrenia patients*. Available at https://www.prisonpolicy.org/scans/97269931.pdf

[xi] Seabury, SA, Goldman, DP, Kalsekar, I, Sheehan, JJ, Laubmeier, K, Lakdawalla, DN. (2014). Formulary restrictions on atypical antipsychotics: Impact on costs for patients with schizophrenia and bipolar disorder in Medicaid. *Am J Manag Care, 20*(2), e52–e60.

[xii] MT Eaddy, et al. (2012). How patient cost-sharing trends affect adherence and outcomes. *Pharmacy & Therapeutics, 37*(1), 45–55. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3278192/

[xiii] Hsu, J, Price, M, Huang, J, Brand, R, Fung, V, Hui, R, …Selby, JV. (2006). Unintended consequences of caps on Medicare drug benefits. *N Engl J Med* 354(22), 2349–2359.

[xiv] Sun, P, Lian, J. (2016). Treatment adherence in newly diagnosed type 2 diabetes: Patient characteristics and long-term impact of adherence on inpatient care utilization. *Postgrad Med, 128*(4), 338–345. doi: 10.1080/00325481.2016.1151326

[xv] Zhang Y, Adams AS, Ross-Degnan D, Zhang F, Soumerai SB. (2009). Effects of prior authorization on medication discontinuation among Medicaid beneficiaries with bipolar disorder. *Psychiatr Serv 60*(4), 520–527. Available at http://ps.psychiatryonline.org/doi/full/10.1176/ps.2009.60.4.520.

[xvi] Yang Z, Howard DH, Will J, Loustalot F, Ritchey M, Roy K. (2016). Association of antihypertensive medication adherence with healthcare use and Medicaid expenditures for acute cardiovascular events. *Med Care 54*, 504–511.

[xvii] Markowitz, M, Karve, S, Panish, J, Candrilli, S, Alphs, L. (2013). Antipsychotic adherence patterns and health care utilization and costs among patients discharged after a schizophrenia-related hospitalization. *BMC psychiatry, 13*(1), 246. Available at https://bmcpsychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-246

[xviii] Becker, MA, Young, MS, Ochshorn, E, Diamond, RJ. (2007). The relationship of antipsychotic medication class and adherence with treatment outcomes and costs for Florida Medicaid beneficiaries with schizophrenia. *Adm Policy Ment Health, 34*(3), 307–314. doi:10.1007/s10488-006-0108-5

[xix] Herndon, JB, Mattke, S, Evans Cuellar, A, Hong, SY, Shenkman, EA. (2012). Anti-inflammatory medication adherence, healthcare utilization and expenditures among Medicaid and children's health insurance program enrollees with asthma. *PharmacoEconomics, 30*(5), 397–412. doi:10.2165/11586660-000000000-00000

[xx] Soumerai, SB, Zhang, F, Ross-Degnan, D, Ball, DE, LeCates, RF, Law, MR, Hughes, TE, Chapman, D, Adams, AS. (2008). Use of atypical antipsychotic drugs for schizophrenia in Maine Medicaid following a policy change. *Health Affairs 27*(3), w185– w195. doi: 10.1377/hlthaff.27.3.w185. Available at http://content.healthaffairs.org/content/27/3/w185.full.pdf+html

[xxi] Melfi, CA, Chawla, AJ, Croghan, TW, Hanna, MP, Kennedy, S, Sredl, K. (1998). The effects of adherence to antidepressant treatment guidelines on relapse and recurrence of depression. *Arch Gen Psychiatry, 55*(12), 1128–1132.

[xxii] Kostova, D, Fox, J. (2017). Chronic health outcomes and prescription drug copayments in Medicaid. *Med Care, 55*(5), 520– 527.

[xxiii] Farley, JF. (2010). Medicaid prescription cost containment and schizophrenia: a retrospective examination. *Med Care, 48*(5), 440–447. doi:10.1097/MLR.0b013e3181d502bd

[xxiv] Amin, K, Farley, JF, Maciejewski, ML, Domino, ME. (2017). Effect of Medicaid policy changes on medication adherence: Differences by baseline adherence. *Journal of Managed Care & Specialty Pharmacy, 23*(3), 337–345. doi:10.18553/jmcp.2017.23.3.337

[xxv] Subramanian, S. (2011). Impact of Medicaid copayments on patients with cancer: Lessons for Medicaid expansion under health reform. *Med Care, 49*(9), 842–847.

[xxvi] Kenyon, CC, Rubin, DM, Zorc, JJ, Mohamad, Z, Faerber, JA, Feudtner, C. (2015). Childhood asthma hospital discharge medication fills and risk of subsequent readmission. *Journal of Pediatrics, 166*(5), 1121–1127.

[xxvii] Feldman, CH, Yazdany, J, Guan, H, Solomon, DH, Costenbader, KH. (2015). Medication nonadherence is associated with increased subsequent acute care utilization among Medicaid beneficiaries with systemic lupus erythematosus. *Arthritis Care Res 67*(12), 1712–1721.

[xxviii] Herndon, JB, Mattke, S, Evans Cuellar, A, Hong, SY, Shenkman, EA. (2012). Anti-inflammatory medication adherence, healthcare utilization and expenditures among Medicaid and children's health insurance program enrollees with asthma. *PharmacoEconomics, 30*(5), 397-412. doi:10.2165/11586660-000000000-00000. Available at https://link.springer.com/article/10.2165%2F11586660-000000000-00000

[xxix] Rust, G, Zhang, S, McRoy, L, Pisu, M. (2015). Potential savings from increasing adherence to inhaled corticosteroid therapy in Medicaid-enrolled children. *American Journal of Managed Care, 21*(3), 173–180.

[xxx] Huskamp, H.A., Deverka, P.A., Epstein, A.M, Epstein, R.S., McGuigan, K.A., Frank, R.G (2003).The Effect of Incentive- Based Formularies on Prescription-Drug Utilization and Spending. *The New England Journal of Medicine,* 349:2224-2232.

[xxxi] Bailey, JE, Wan, JY, Tang, J, Ghani, MA, Cushman, WC. (2010). Antihypertensive medication adherence, ambulatory visits, and risk of stroke and death. *Journal of General Intern Medicine, 25*(6), 495–503.

[xxxii] Yang, Z, Howard DH, Will, J, Loustalot, F, Ritchey M, Roy, K. (2016, February). Association of antihypertensive medication adherence with healthcare use and Medicaid expenditures for acute cardiovascular events. *Med Care 54*(5), 504–511.

[xxxiii] Subramanian, S. (2011). Impact of Medicaid copayments on patients with cancer: Lessons for Medicaid expansion under health reform. *Med Care, 49*(9), 842–847.

[xxxiv] Wallace, NT, McConnell, KJ, Gallia, CA, Smith, J A. (2008). How effective are copayments in reducing expenditures for low-income adult Medicaid beneficiaries? Experience from the Oregon health plan. *Health Serv Res, 43*(2), 515–530. doi:10.1111/j.1475-6773.2007.00824.x

[xxxv] Wright, WA, Gorman, JM, Odorzynski, M, Peterson, MJ, Clayton, C. (2016) Integrated pharmacies at community mental health centers: Medication adherence and outcomes. *Journal of Managed Care & Specialty Pharmacy, 22*(11),1330–1336.

[xxxvi] Candrilli, SD, O'Brien, SH, Ware, RE, Nahata, MC, Seiber, EE, Balkrishnan, R. (2011). Hydroxyurea adherence and associated outcomes among Medicaid enrollees with sickle cell disease. *American Journal of Hematology, 86*(3), 273–277. doi:10.1002/ajh.21968

[xxxvii] Roebuck, MC, et al. (2016). Impact of medication adherence on hospitalization in Medicaid. *Proceedings of the 21st Annual International Meeting International Society of Pharmacoeconomics and Outcomes Research.* Washington, DC. Abstract available at https://www.ispor.org/ScientificPresentationsDatabase/Presentation/64534

[xxxviii] Roebuck, MC, Dougherty, JS, Kaestner, W, Miller, L. (2015). Medical cost offsets from prescription drug use in Medicaid. *Health Aff 34*(9), 1586–1593.

[xxxix] Feldman, CH, Yazdany, J, Guan, H, Solomon, DH, Costenbader, KH. (2015). Medication nonadherence is associated with increased subsequent acute care utilization among medicaid beneficiaries with systemic lupus erythematosus. *Arthritis Care Res 67*(12), 1711–1721.

[xl] Kenyon, CC, Rubin, DM, Zorc, JJ, Mohamad, Z, Faerber, JA, Feudtner, C. (2015). Childhood asthma hospital discharge medication fills and risk of subsequent readmission. *Journal of Pediatrics, 166*(5),1121–1127.

[xli] Herndon, JB, Mattke, S, Evans Cuellar, A, Hong, SY, Shenkman, EA (2012). Anti-inflammatory medication adherence, healthcare utilization and expenditures among Medicaid and children's health insurance program enrollees with asthma. *PharmacoEconomics, 30*(5), 397–412. doi:10.2165/11586660-000000000-00000. Available at https://link.springer.com/article/10.2165%2F11586660-000000000-00000

[xlii] Seabury, SA, Goldman, DP, Kalsekar, I, Sheehan, JJ, Laubmeier, K, Lakdawalla, DN. (2014). Formulary restrictions on atypical antipsychotics: impact on costs for patients with schizophrenia and bipolar disorder in Medicaid. *Am J Manag Care, 20*(2), e52–e60.

[xliii] Ibid.

[xliv] West, JC., Wilk, JE, Rae, DS, Muszynski, IS, Stipec, MR, Alter, CL, … Regier, DA. (2009). Medicaid prescription drug policies and medication access and continuity: Findings from ten states. *Psychiatr Serv, 60*(5), 601–610.

[xlv] Goldman, D, Fastenau, J, Dirani, R, Hellend, E, Joyce, GF, Conrad, R, Lakdawalla, D. (2014). Medicaid prior authorization policies and imprisonment among patients with schizophrenia. *Am J Manag Care, 20*(7).

[xlvi] Seabury, SA, Goldman, DP, Kalsekar, I, Sheehan, JJ, Laubmeier, K., Lakdawalla, DN. (2014). Formulary restrictions on atypical antipsychotics: Impact on costs for patients with schizophrenia and bipolar disorder in Medicaid. *Am J Manag Care, 20*(2), e52–e60.

[xlvii] Campbell, DJ, Tonelli, M, Hemmelgarn, B, Mitchell, C, Tsuyuki R, Ivers, N, Campbell, T, et. al (2016). Assessing outcomes of enhanced chronic disease care through patient education and a value-based formulary study (ACCESS)—study protocol for a 2×2 factorial randomized trial. *Implementation Science, 11(13).* doi: 10.1186/s13012-016-0491-6

[xlviii] Tamblyn R, Laprise R, Hanley JA, Abrahamowicz M, Scott S, Mayo N, et al (2001). Adverse events associated with prescription drug cost-sharing among poor and elderly persons. *JAMA. 285, 421–429.*

[xlix] Persson, EL, Miller, KS, Nieman, JA, Sgourakis, AP, Akkerman, SR (2013).. Formulary Evaluation Using a Class Review Approach: Experience and Results From an Academic Medical Center. *Pharmacy and Therapeutics, 38(4)213-216.*