

Measurably Improving Value in Health

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“The Schaeffer Center’s rigorous research provides the foundational evidence for developing effective public policies, improving the healthcare system and, ultimately, enhancing health.” **-LEONARD D. SCHAEFFER**

# Message from the Co-Directors

## Building Our Influence

**W**ith the rise in political polarization, it is reassuring that policymakers on both sides of the aisle rely on the Schaeffer Center's research. Senior officials, from the president to lawmakers and agency leaders, turn to us for rigorous investigations about pressing healthcare challenges. They know our scholars are driven by evidence and offer creative, nonpartisan solutions.

This year has been unusually busy. Center researchers shared their expertise in six congressional and state legislative hearings. We also had dozens of meetings with legislative staff and agency officials. Media outlets featured our insights in their reporting and in opinion pieces by Schaeffer experts, while our events—especially in D.C.—attracted a broad mix of policymakers and industry leaders. Neeraj Sood was named to the Congressional Budget Office's Panel of Health Advisers, while Rosalie Liccardo Pacula has been appointed to co-chair the National Academies' Forum on Mental Health and Substance Abuse Disorders.

Schaeffer research continues to help drive the agenda in D.C. and beyond. Our examinations of pharmacy benefit managers' role in inflating pharmaceutical costs, for instance, generated national coverage, leading to bipartisan legislation aimed at curbing practices we brought to light. Similarly, our insights have shaped key debates around the implementation of the Inflation Reduction Act, access to Alzheimer's drugs and the value of obesity treatments.



↑ Dana Goldman and Erin Trish

As we mark the Center's 15th anniversary, we are deeply appreciative of the investment in our future from our founder, Leonard Schaeffer, and his late wife, Pamela. Their gift established the Leonard D. Schaeffer Institute for Public Policy & Government Service, which will be an anchor of USC's Capital Campus. Through this support, we will forge even closer relationships with federal policymakers who rely on our work.

The challenges facing healthcare continue to evolve, which is why the Schaeffer Center will always aim to be nimble in addressing and anticipating new problems. What will never change, however, is our commitment to evidence-based answers for expanding access to quality healthcare and improving health.

As we pursue these objectives, we remain grateful for the Schaeffers' remarkable generosity and the support of our Advisory Board. We also appreciate the partnership of the USC Price School of Public Policy and USC Mann School of Pharmacy and Pharmaceutical Sciences that forms the interdisciplinary foundation of our impactful work. Together, and now from both coasts, the Schaeffer Center bridges political divides to provide paths toward a healthcare system that more effectively promotes value and rewards innovation.

Thank you for joining us on this journey.

**Dana Goldman**  
**Erin Trish**  
*Co-Directors, USC Schaeffer Center*

15  
YEARS OF  
MEASURABLY  
IMPROVING  
VALUE IN HEALTH

## Expanding Public Policy Impact Coast to Coast

The Leonard D. Schaeffer Institute for Public Policy & Government Service opened in July 2024 at USC’s recently established Capital Campus in Washington, D.C. Launched with a \$59 million gift from Leonard Schaeffer and his late wife, Pamela, the Institute will produce research that informs evidence-based policymaking to address our nation’s most pressing issues and foster civic engagement. Educating students to be responsible and involved citizens is an especially vital aim at a time when just 25% of young adults express confidence about democracy in the United States.

The Institute expands the reach of the Schaeffer Center for Health Policy & Economics in the nation’s capital. In addition, the gift strengthens and endows the Leonard D. Schaeffer Fellows in Government Service, which fosters new generations of policy leaders through paid fellowships enabling undergraduates to work in local, state and federal government agencies. Building on the successes of

these programs, the Schaeffer Institute serves as a policy laboratory to develop and test ideas generated by the USC academic community and provides a forum to reach federal policymakers.

“This bold and lasting commitment by the Schaeffers advances their life’s passion to impact policy that improves people’s lives and educate students to be responsible and involved citizens,” said USC President Carol Folt when announcing the Institute.

The gift marks the latest example of Leonard Schaeffer’s philanthropic dedication to societal wellbeing and changing the discourse around policy and government service. His leadership in these areas has bridged the private and public sectors, from being founding chair and CEO of what is now Elevance Health to serving as administrator of the forerunner agency to the Centers for Medicare & Medicaid Services, as well as launching the Schaeffer Center itself.

### NATIONAL—AND NONBIASED—REACH

The wide range of interdisciplinary research generated by the Institute will inform many fields, Schaeffer

“The Institute accelerates USC’s capacity to develop effective academic leaders and to forge critical high-impact partnerships.”

—USC PRESIDENT CAROL FOLT



↑ Dana Goldman, USC President Carol Folt, Leonard Schaeffer and USC Provost Andrew T. Guzman at the Schaeffer Institute launch event

notes. “The Institute will have the faculty, students and postdocs to provide the analysis and facts necessary to counter erosion in public discourse and promote more effective policy solutions.”

Such investigations, he emphasizes, are coming in an era when the U.S. needs them most. “Our country is experiencing a series of challenges that are unique in our history,” Schaeffer says. “We are facing many difficult issues around the world—climate change, pandemics, violent conflicts in Europe and the Middle East, and world trade and economic problems, to name a few.”

The Institute’s freedom from bias—a hallmark of the Schaeffer Center as well—is essential, he adds, because, as a nation, “we are experiencing the loss of faith in science and government.”

### ENHANCING POLICY WITH BEHAVIORAL SCIENCE

The Schaeffer Institute began with a bold initiative to advance more effective public policies by leveraging behavioral science—an interdisciplinary field that incorporates elements of psychology, economics and other social sciences.

Directed by Wändi Bruine de Bruin, the Institute’s Behavioral Science & Policy Initiative examines people’s beliefs and behaviors to create policies and communication that more fully serve societal needs.

“We want to help policymakers make a difference,” Bruine de Bruin says. “And that means creating policies and policy communication that better inform the people they want to reach.”

For example, she and her team interviewed U.S. residents about climate change terminology to inform how the United Nations’ Intergovernmental Panel on Climate Change communicates its findings. One interviewee said that communication about climate policies is often “talking way over people’s heads.”

“Our interviewees wanted climate change communication to use everyday language,” Bruine de Bruin observes. “The findings were consistent with our previous research showing that simple language makes information easier to understand. Even highly educated people prefer it.”

In addition to climate change, the Institute is focusing on issues such as global conflicts, food insecurity, financial literacy and healthcare.

The Schaeffer Institute marked the first major research and education facility to be headquartered at the USC Capital Campus, which opened in 2023 and is located in D.C.’s Dupont Circle area. The Institute also maintains offices on USC’s University Park Campus in Los Angeles, making its reach bicoastal to broaden the already significant prominence of initiatives bearing the Schaeffer name.

\$59M

GIFT FROM LEONARD & PAMELA SCHAEFFER ANCHORS USC’S PRESENCE IN D.C.

# By the Numbers

85

SCHOLARS, INCLUDING 3 NOBEL LAUREATES

1,800+

STUDIES PUBLISHED BY SCHAEFFER SCHOLARS SINCE 2009

500+

COMMENTARIES, OP-EDS & BLOG POSTS SINCE 2009

400+

CITATIONS OF SCHAEFFER WORK IN GOVERNMENT REPORTS & DOCUMENTS SINCE 2009

6

FEDERAL & STATE HEARINGS FEATURING SCHAEFFER WITNESSES FROM JANUARY 1, 2023–JUNE 30, 2024

200+

INTERACTIONS WITH POLICYMAKERS FROM JANUARY 1, 2023–JUNE 30, 2024

23%

AVERAGE YEAR-OVER-YEAR GROWTH IN WEB-SITE VISITORS DURING THE LAST 4 YEARS

11

ECONOMIC REPORTS OF THE PRESIDENT CITE SCHAEFFER WORK

1

NEW USC CAPITAL CAMPUS IN WASHINGTON, D.C., WITH A FLOOR DEDICATED TO THE SCHAEFFER INSTITUTE

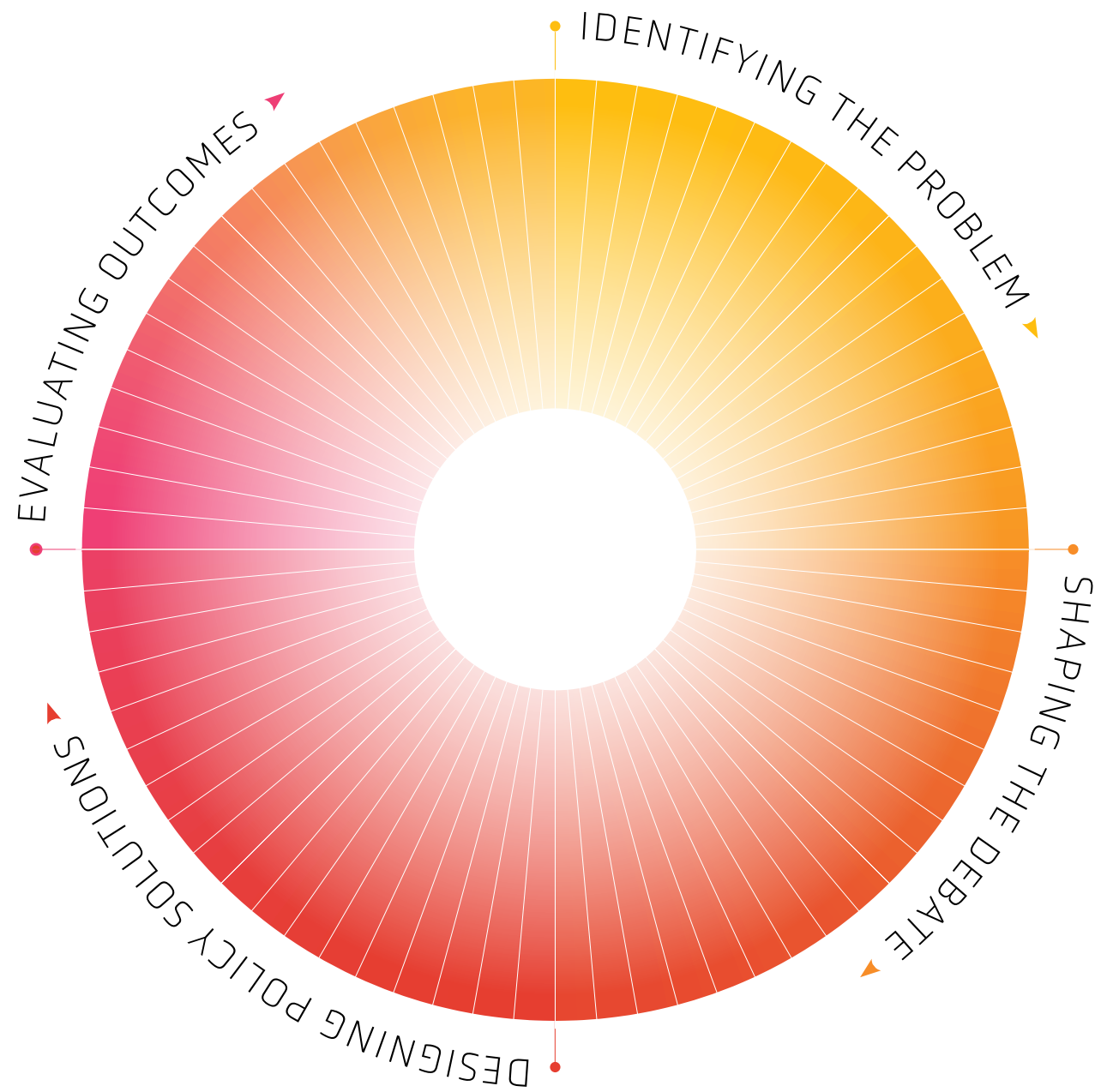
10,400

MEDIA MENTIONS FROM JANUARY 1, 2023–JUNE 30, 2024

“Truly free markets exist only on the whiteboard in my classroom at USC. But it is also true that without patent protection, there would be no innovation. That is a result that has been known in economics for centuries.”

**DARIUS LAKDAWALLA**, in response to Sen. Bernie Sanders (I-Vt.) at a Senate Committee on Health, Education, Labor and Pensions hearing on drug prices (2024)

# Policy Impact Cycle

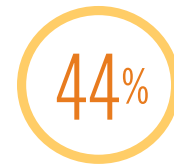
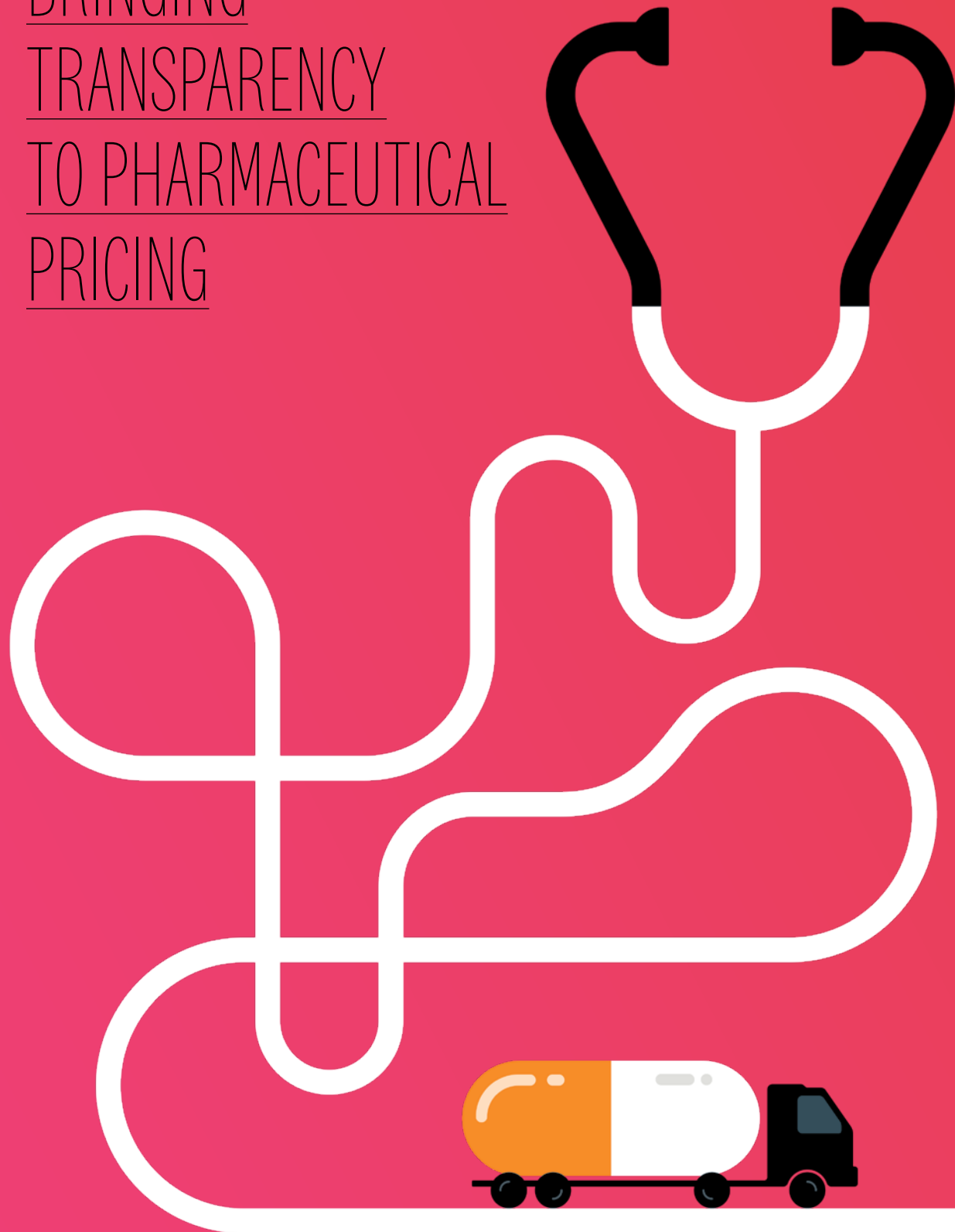


- 1 Identify opportunities to improve the performance of the healthcare system.** Schaeffer research assesses how well healthcare markets, financing and delivery are functioning and identifies areas where the system is not meeting society's needs.
- 2 Amplify the conversation by disseminating evidence to drive solutions.** Schaeffer experts generate interest in and understanding of an issue by broadly sharing evidence-based research and analysis that fosters new approaches.
- 3 Design policy and provide evidence for decision making.** Schaeffer scholars develop recommendations that inform policymaking, from statehouses to the federal level and across the healthcare industry.
- 4 Evaluate outcomes and analyze consequences of policies.** Schaeffer studies assess the cost, efficiency and distributional impact of reforms to identify likely outcomes of policies and areas for improvement.

Schaeffer Center research informs health policy decision making. From reforms to Medicare to new frameworks for drug pricing and investigations into healthcare markets, Center experts develop data-driven, evidence-based solutions.

The Schaeffer Center policy impact cycle illustrates four pathways that are leveraged to inform action: identifying the problem, shaping the debate, designing policy solutions and evaluating outcomes. The following sections feature examples of research moving through the cycle. Whether Schaeffer experts are putting new ideas into the public discourse or evaluating the outcomes of policy, through this process the Center can effectively transform the system and improve value in health.

# BRINGING TRANSPARENCY TO PHARMACEUTICAL PRICING



44%  
OF DRUGS  
WERE RESTRICTED  
OR EXCLUDED  
BY PART D  
PLANS IN 2020



50%  
OF THE TIME,  
COSTCO CASH  
PRICES WERE LOWER  
THAN MEDICARE  
PLANS IN AN  
ANALYSIS OF THE  
184 MOST COMMON  
GENERIC DRUGS



550+  
MEDIA MENTIONS  
OF SCHAEFFER  
RESEARCH  
ANALYZING THE  
PHARMACEUTICAL  
DISTRIBUTION SYSTEM

As intermediaries between insurers and pharmaceutical companies, pharmacy benefit managers (PBMs) control every aspect of the prescription drug benefit process—from setting prices to deciding which medications are covered and how often they’re dispensed. Although PBMs have existed for decades, increasing market concentration and vertical integration have reduced competition and increased opacity throughout the system.

The Schaeffer Center was an early leader in shedding light on how PBMs have distorted the medical marketplace, with research on the topic dating back to the Center’s inception.

In recent years, Schaeffer Center scholars have exposed numerous practices in the pharmaceutical distribution system that force patients to overpay for vital medications. Led by Executive Director of Value of Life Sciences Innovation Karen Van Nuys, this research ranges from casting light on co-pay clawbacks—through which insurers pocket the difference when patients’ co-payments exceed a drug’s cost—to spread pricing, when PBMs charge more to health plans than the amount reimbursed to pharmacies.

Other Schaeffer investigations followed the money to elucidate the supply chain practices that keep list prices high for such vital drugs as insulin—even as the actual costs of manufacturing declined. In 2023, following increased frustration about the cost of insulin, the federal Inflation Reduction Act capped Medicare Part D out-of-pocket costs for insulin at \$35 per monthly prescription, with a similar cap in Part B quickly following.

### COSTS OF CONSOLIDATION

As healthcare markets become even more consolidated, PBMs remain middlemen, but they are no longer the independent, third-party businesses they were in the 1960s.

In work published by the National Bureau of Economic Research, Neeraj Sood and colleagues documented the increasing vertical integration in the Medicare Part D market for prescription drug coverage. They found that the percentage of Part D beneficiaries enrolled in plans that are vertically integrated with PBMs increased from 30% to 80% between 2010 and

2018. In addition, the acquisition of Catamaran—the last significant independent PBM—by UnitedHealth led to increased premiums for former clients forced to switch to PBMs owned by rival insurers.

Sood and his co-authors observed that, after the merger, premiums increased “for insurers who bought PBM services from rivals, which is consistent with vertically integrated PBMs raising costs through input foreclosure”—that is when services are cut to competitors of the new owner. As a result, they noted, nonvertically integrated insurers experienced premium increases of 36% compared to their vertically integrated counterparts. Nor did UnitedHealth enrollees benefit, as their premiums showed no savings.

### CALLING ATTENTION TO RESTRICTIONS

While such practices increase costs, the policy of formulary restrictions can eliminate coverage for certain medications altogether. Research by Geoffrey Joyce and Van Nuys, published in *Health Affairs*, highlighted the increased restrictions on prescription drugs in Medicare Part D. Outside the “protected classes” of drugs for certain chronic conditions, they found that the share of therapeutic compounds restricted or excluded by Part D plans surged from approximately 31.9% in 2011 to 44.4% in 2020.

In addition to outright exclusions, the study also noted increases in prior authorization, which requires approval before filling a prescription, and step therapy, which demands that a cheaper medication be tried before using the prescribed one.

The latest phase in this research focuses on “what happens to patients with multiple sclerosis when they are in a Medicare plan that restricts their access through these exclusionary practices,” Van Nuys says.

### ADDRESSING INEQUITY

Of course, expanding the affordability of medications makes no difference unless there are widely available pharmacies where they can be purchased. Dima Qato—who coined the term “pharmacy desert” and created an interactive map of such shortages—conducts research to reduce healthcare inequities by widening access to medications. Her efforts include being awarded a \$1.65 million grant from the National Institute on Aging to investigate the structural racism in Medicare Part D and its impact on pharmacy closures.

55+

CITATIONS

OF SCHAEFFER'S PBM RESEARCH IN GOVERNMENT DOCUMENTS, INCLUDING REPORTS BY CONGRESS & THE FEDERAL TRADE COMMISSION

3

FEDERAL HEARINGS

WITH SCHAEFFER EXPERT WITNESSES PROVIDING CONGRESS WITH INFORMATION ABOUT PBMS

The project targets how narrow coverage networks, low reimbursements and PBMs all contribute to worsening disparities in medication adherence for older adults. “Medicare Part D has created a system where it’s hard for pharmacies to stay open in neighborhoods that mainly serve Black and Latinx beneficiaries,” Qato notes. “Medicare and Medicaid are not paying pharmacists enough for the prescriptions dispensed to patients. And PBMs play a huge role in that inadequate reimbursement.”

TRUSTED BY MEDIA AND POLICYMAKERS

Schaeffer Center scholars have garnered national coverage for demystifying the pharmaceutical distribution chain, in addition to contributing their own articles to major outlets. Writing in *The Washington Post*, Schaeffer Center Co-Director Erin Trish and Van Nuys suggest that consumers and taxpayers would save billions of dollars if insurance coverage ended for low-cost generic drugs—which represent 90% of all prescriptions.

In another article, published in *The Hill*, Sood and Van Nuys urged policymakers to inject transparency into the drug supply chain. Inflated drug costs can only be driven down, they wrote, when everyone knows “what is being charged, and by whom to whom.”

These policymakers frequently call on Schaeffer Center experts to share their findings directly. Trish has testified about how PBMs increase costs before the Senate Committee on Commerce, Science and Transportation. “Where there is mystery, there is margin,” Trish told the lawmakers, noting how the “dynamics and the incentives in this market are not working for many patients.”

As PBMs are a concern at the state level as well, Trish was also recently called upon by the California Assembly Select Committee on Biotechnology to share the Center’s findings about PBMs.

Meanwhile, Van Nuys has spoken about the need for transparency before the U.S. Senate Finance Committee. In addition, she was called upon for a meeting at the White House after *The Wall Street Journal* quoted her about generic drug pricing. There she answered questions about PBMs and explained her idea of stopping insurance coverage for cheap generics—which would save Medicare roughly \$2.6 billion a year.

“The system has lost sight of the purpose of insurance,” Van Nuys says. “It should not be to offer co-pays for low-cost generics while rare diseases are being carved out of coverage.”

CONTINUING POLICY IMPACT

Through research presenting clear insights and potential solutions, Schaeffer Center scholars have a demonstrable impact on public policy. Spurred by their findings, the U.S. House and Senate recently introduced more than a dozen bills aiming to reform the PBM market. These include the Pharmacy Benefit Manager Transparency Act of 2023, put forth by Senators Maria Cantwell (D-Wash.) and Chuck Grassley (R-Iowa). The legislation would prohibit PBMs from charging insurance plans amounts that differ from the pharmacy reimbursement, as well as targeting such practices as co-pay clawbacks and spread pricing.

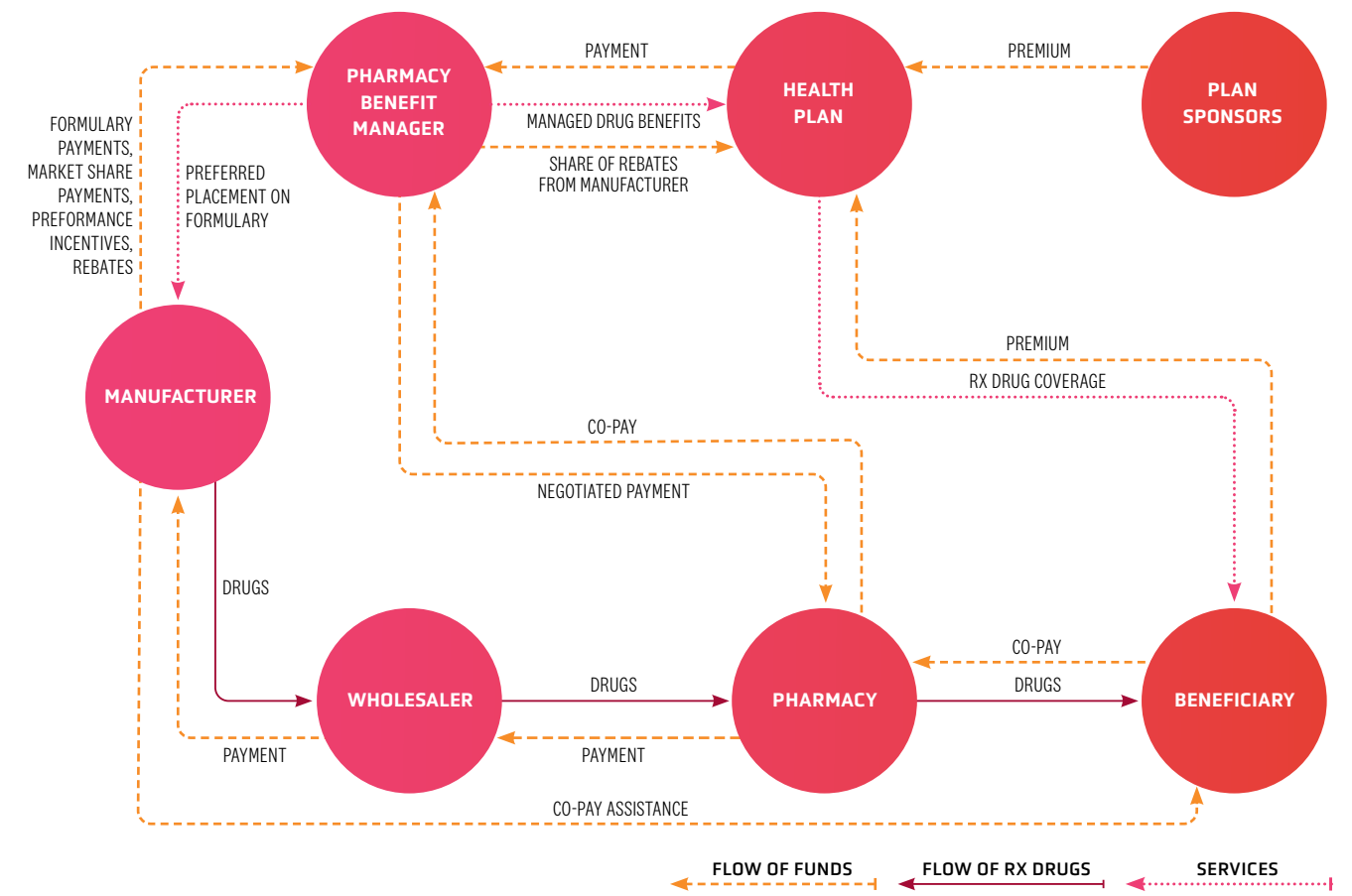
The Federal Trade Commission also cited Schaeffer studies in its decision to investigate PBM practices. Of the six companies being probed, three control nearly 80% of the market.

Because the pharmaceutical industry keeps evolving, the Center continues to clarify the complexities of how the distribution system drives costs and limits access. For instance, attempting to stay ahead of reform, the big three PBMs have established group purchasing organizations (GPOs) to further their already immense bargaining power.

“We continue to see a new kind of offshore GPO, based in countries like Switzerland and Ireland,” Van Nuys notes. “And PBMs are now even partnering with manufacturers to produce biosimilars and participate in revenue streams from those.” So upcoming studies will address these market changes and their impact on prices as well.

“The Schaeffer Center is uniquely positioned to draw attention to these trends and help policymakers address these issues,” Van Nuys says. Schaeffer scholars have outlined several principles that should form a foundation for comprehensive and sustainable PBM reform: 1) The highly concentrated PBM industry’s market power often works against patient interest; 2) Congress must anticipate how businesses will react to new regulation; 3) Price transparency is the best avenue for making markets work better; 4) Patients need to see savings; and 5) PBMs should have a fiduciary responsibility to their clients.

Flow of Money Through the Pharmaceutical Distribution System



UNLEASHING BIOSIMILAR SAVINGS

Biosimilars provide the same therapeutic benefits as brand-name biologics—but at much less expense to patients. Schaeffer Center scholars were among the first to examine the nationwide market share, pricing and prescribing of these drugs, which began entering the marketplace in 2015.

Alice Chen, Karen Van Nuys and colleagues analyzed how biosimilars can reduce the price of their branded counterparts for a pioneering study published in *Health Affairs*. Comparing the cancer drug Herceptin (trastuzumab) with five biosimilars, they found that the alternatives’ sales price ranged from 28% to 58% of the brand-name version. Meanwhile, the biosimilars’ net prices—what patients and insurers ultimately pay—ranged from 15% to 46% of the cost of the originator drug. The data showed that Herceptin began losing market share immediately after the first biosimilar went on sale, a trend that continued as others became available. Yet the full benefits of biosimilars will be restrained until insurers cover them appropriately, according to the researchers.

Another study, led by Jakub Hlávka and published in *BioDrugs*, was the first to address the drivers of biosimilar coverage. The research found that insurers either excluded or imposed restrictions on biosimilars in 19.4% of the cases examined—even when the branded alternatives were more expensive.

The Food and Drug Administration recently proposed freeing biosimilar manufacturers from the requirement of studies showing the impact of switching between branded drugs and biosimilars. The change could ease the ability of pharmacists to substitute proven biosimilars for costly originator drugs.





## EASING THE BURDEN OF ALZHEIMER'S

**M**ore than 10% of U.S. seniors are enduring the cognitive impairment caused by Alzheimer's disease and related dementias (ADRD), with up to another 22% experiencing the minor decline that often foreshadows ADRD. "One of the strongest risk factors for onset of Alzheimer's and dementia is age," notes Julie Zissimopoulos, co-director of the Schaeffer Center's Aging and Cognition Research Program.

Schaeffer Center experts from across disciplines are addressing ADRD by evaluating its toll, promoting access to earlier diagnoses and treatment, and developing new models for covering the cost of innovative therapies. The work is urgent, as the findings of Bryan Tysinger, Dana Goldman and colleagues reveal the aggregate national burden of cognitive impairment to be \$627 billion—with the heaviest hardships falling on minority and disadvantaged populations.

### ESTIMATING ADRD'S HIDDEN COSTS

Zissimopoulos and USC colleagues from the Keck School of Medicine, Mann School of Pharmacy and Pharmaceutical Sciences, Leonard Davis School of Gerontology, Dworak-Peck School of Social Work and Viterbi School of Engineering garnered a five-year, \$8.2 million grant from the National Institute on Aging to build a model for generating comprehensive annual estimates of ADRD costs nationwide. The project could help shape healthcare policy by better recognizing the stresses borne by caregivers and families of those with ADRD.

"Most cost estimates at the population level focus on the unpaid caregiver costs and medical care expenses," notes Zissimopoulos, who is a national thought leader on the topic and also co-directs two interdisciplinary centers funded by the National Institutes of Health. The model being developed will go beyond that, she says, to address the "intangible costs of pain and suffering."

This will enable researchers to calculate such factors as the social and economic impact of drugs that treat the neuropsychiatric symptoms associated with advanced dementia. To maximize impact, the model will be publicly available with a user-friendly interface.

### (MIS)UNDERSTANDING BLOOD PRESSURE READINGS

Many people don't understand healthy blood pressure levels—yet believe they do, according to research co-authored by Wändi Bruine de Bruin. Surveying 6,500 Americans, she and her team noted that 64% of respondents expressed confidence in their knowledge, but only 39% were actually aware of what normal blood pressure is.

The findings are troubling, as more than three-quarters of Americans age 65 and older—and half the adult population overall—have hypertension, also known as high blood pressure. This false sense of confidence can stop people from seeking care for the condition, which greatly increases the risks of stroke and heart disease. In addition, Bruine de Bruin says, when measurements are taken, "knowledge about what these blood pressure numbers mean is not being transferred from the provider to the patient."

### EXPANDING COGNITIVE ASSESSMENTS

Early detection of ADRD is crucial to letting clinicians and patients prepare for future needs and identify treatment options—but its warning signs often go undetected. Medicare's annual wellness visit, which requires a cognitive assessment, can be valuable in detecting dementia in older adults. Mireille Jacobson, co-director of the Aging and Cognition Research Program, led a study with Zissimopoulos and colleagues that found that the majority of patients over age 65 do not receive a cognitive assessment at their annual wellness visit, with the lowest rates of screening occurring among minority populations.

"The annual wellness visit benefit is an important tool for detecting cognitive impairment and dementia among Medicare beneficiaries and provides an opportunity to reduce racial/ethnic disparities in dementia diagnosis," Jacobson notes.

Yet with ADRD rates rising, more needs to be done, Zissimopoulos adds, noting the absence of a universal cognitive screening test in the U.S. To address this, she helped convene fellow experts nationwide to find ways of making cognitive assessments routine and widely used. They developed three recommendations for policymakers and third-party payers: providing primary care clinicians with effective assessment tools, integrating brief cognitive screenings into routine healthcare workflows and crafting payment policies to encourage cognitive evaluations.

### ENSURING ACCESS TO INNOVATIVE THERAPIES

Although no cure exists for ADRD, treatments are improving. For example, lecanemab, shown to slow the progression of mild Alzheimer's, has been approved by the Food and Drug Administration. "For the sake of patients, Medicare needs to ensure coverage to encourage continued development of real-world evidence on its effectiveness," Goldman says.

Yet the Centers for Medicare & Medicaid Services (CMS) dictated that Alzheimer's coverage be extended only to individuals enrolled in clinical trials. "Guess how many such trials are currently enrolling Alzheimer's patients? None," wrote Joe Grogan in *The Wall Street Journal*.

Jacobson, Grogan, Zissimopoulos and other Schaeffer scholars submitted a comment letter to CMS encouraging the update of its Coverage with Evidence Development (CED) policy, which restricts access to Alzheimer's drugs. Their suggestions include: limiting CED to scenarios where real-world evidence is needed, tailoring coverage constraints to foster generating that evidence and removing such restrictions as soon as effectiveness questions are answered. They also urge the involvement of patients as key stakeholders in the decision-making process.

### MODELING THE FUTURE

Since the costs of innovative ADRD therapies accrue faster than their benefits, Tysinger, Jakub Hlávka and colleagues used the Schaeffer Center's Future Elderly Model to estimate the benefits of new treatments. The modeling found benefits in even the least optimistic therapeutic scenario. Their projections also included payment models of constant and performance-based installments. "Both avoid the net loss accrual to private payers," the researchers note.

Further, because ADRD affects diverse populations differently, Jacobson and Zissimopoulos continue working with the Clinical Trial Recruitment Lab, an interdisciplinary lab housed at the Schaeffer Center, and the USC Alzheimer's Therapeutic Research Institute. The program, which is initially focused on Alzheimer's disease, will test ways to accelerate clinical trial development and increase participation in clinical trials from underserved groups.

10%

OF U.S. SENIORS  
HAVE COGNITIVE  
IMPAIRMENT CAUSED  
BY ALZHEIMER'S  
DISEASE & RELATED  
DEMENTIAS

ONLY  
25%

OF MEDICARE  
BENEFICIARIES  
REPORT HAVING  
A COGNITIVE  
ASSESSMENT AT  
THEIR ANNUAL  
WELLNESS VISIT

# ADDRESSING OBESITY

\$1

## TRILLION

OVER 10 YEARS  
IN VALUE TO  
SOCIETY FROM  
MEDICARE  
COVERAGE FOR  
NEW WEIGHT-  
LOSS DRUGS

IF ALL AMERICANS  
ELIGIBLE FOR  
OBESITY  
TREATMENTS  
GAINED ACCESS,  
THE PREVALENCE  
OF OBESITY IN  
THE MEDICARE  
POPULATION  
WOULD FALL BY

53%

AFTER THE  
FIRST DECADE

The Schaeffer Center has long been ahead of the curve in addressing the causes and costs of obesity—and its research, including on the benefits of recently approved weight-loss drugs, is more urgently needed now than ever. Today, nearly 70% of adults nationwide have obesity or are overweight, heightening the risk of stroke, heart disease, type 2 diabetes and other dangerous conditions. As a result, an estimated 300,000 Americans die from obesity-related conditions every year.

But while many blame rising weight gain on the popularity of ultra-processed foods, Schaeffer Center Chief Scientific Officer Darius Lakdawalla notes another factor: shifts in technology that have made work less physically demanding.

“Over time, many jobs were becoming sedentary, while food was getting cheaper,” explains Lakdawalla, who has been researching obesity since earning his PhD in 2000. “Instead of work being active, so that people were actually paid to exercise, they were being paid to sit. As a result, you have changes in cost on both sides of the weight equation. It’s cheaper to take in calories and more expensive to expend them.”

From the launch of the Schaeffer Center in 2009, Lakdawalla and Co-Director Dana Goldman have collaborated on a range of impact studies related to healthcare value and access—including the effects of obesity and other chronic conditions.

In the 15 years since, Schaeffer Center researchers have examined obesity’s consequences for government budgets, including Medicare and Social Security, along with its interactions with other health-related behaviors. “We’ve been sounding the alarm for a long time, and things have changed—but slowly,” Goldman says. “Obesity is still often viewed as a lifestyle choice rather than a serious health concern, creating stigma around treatment.”

## COVERING ANTI-OBESITY TREATMENTS

Because Schaeffer Center scholars are committed not just to documenting public health challenges but also to finding policy solutions, Lakdawalla, Schaeffer Health Policy Simulation Director Bryan Tysinger and colleagues modeled the effectiveness of numerous weight-loss interventions—from behavioral nudges to bariatric surgery and sugar taxes. However, these were shown to have limited effectiveness on any meaningful population-wide scale.

Then the team took special notice of recent breakthroughs in anti-obesity drugs. These weight-loss medications, known as GLP-1s and approved by the Food and Drug Administration (FDA), could help ease the crisis—if only they were allowed to fulfill their promise. But because of costs—and since Medicare and most private insurers exclude weight-loss therapies from coverage—only a fraction of eligible patients receive treatment.

As debates about the expense of GLP-1 drugs escalated, Schaeffer Center studies were the first to demonstrate the advantages such therapies offer. Alison Sexton Ward, Tysinger, PhuongGiang Nguyen, Goldman and Lakdawalla authored a pioneering white paper showing the immense benefits that would flow from allowing Medicare to pay for weight-loss treatments. The researchers used the Future Adult Model (FAM)—the Schaeffer Center’s economic-demographic microsimulation that combines data from numerous nationwide surveys—to forecast lifetime health, medical spending, social service use and economic outcomes.

Through FAM, they estimated the impact of the bipartisan Treat and Reduce Obesity Act (TROA), which would expand Medicare Part D’s prescription benefits to include FDA-approved drugs for chronic weight management. Their analysis revealed that Medicare coverage of these drugs would save

OBESITY IS THE SECOND-LEADING CAUSE OF PREVENTABLE DEATH IN THE U.S. INNOVATIVE PRICING STRATEGIES & POLICY REFORMS WOULD IMPROVE ACCESS TO TREATMENT.





MORE IS SPENT BY MEDICARE ON PEOPLE WITH OBESITY COMPARED WITH THOSE OF LOWER WEIGHT

900+

MEDIA MENTIONS

OF SCHAEFFER OBESITY FINDINGS SINCE THE 2023 WHITE PAPER

“Instead of work being active, so that people were actually paid to exercise, they were being paid to sit. As a result, you have changes in cost on both sides of the weight equation. It’s cheaper to take in calories and more expensive to expend them.” —DARIUS LAKDAWALLA

taxpayers at least \$175 billion in the first decade alone. By 30 years, the cost offsets could reach \$700 billion.

The team also found that more than 60% of the savings would flow to Medicare Part A, which covers hospital, hospice, nursing facility and home care. This could help Medicare avoid the insolvency that threatens to occur in a matter of years. The savings and value would increase even further if private insurers followed Medicare’s lead, which they usually do. But even without enhancements to commercial insurance, the U.S. would garner as much as \$100 billion every year in social benefits from improvements in quality of life, which, in turn, would lower overall healthcare spending.

“Because obesity is associated with many chronic conditions that significantly impact patients’ lives—and Medicare’s costs—reducing obesity rates has a ripple effect in the prevalence of other conditions,” Ward says.

#### COSTS AND VALUE

Writing in *STAT*, Goldman and Ward address misguided suggestions that the price of these weight-loss drugs be reduced through federal controls, pointing out the inaccurate data behind these notions and emphasizing the savings derived from a healthier populace. In addition, they note how competition brought down the initial costs of treatments for hepatitis C, HIV and other diseases.

“After years of treatment, the immense value generated by these therapies dwarfs their initial costs,” Goldman and Ward observe. “Price controls can work in the short run to help affordability. But in the long run, they suppress innovation and cost lives.”

Instead of such caps, Karen Van Nuys, Barry Liden, Ward, Tysinger, Goldman and Lakdawalla responded to the government’s concerns about pricing in a comment letter to the Congressional Budget Office, suggesting ways of improving its analysis of federal policies related to anti-obesity medications.

The Schaeffer researchers also put forth a viable solution: a three-part model that starts with relatively low pricing. The more effective a drug is shown to be, the more its price would increase. As patents

expire and generic versions enter the market, the expense would decrease. “The strategy would pay manufacturers more when weight loss is longer lasting and more durable, and less when the opposite is true,” Lakdawalla says.

#### MEDIA REACH AND POLICY CHANGES

Schaeffer scholars have also gotten word out through the media about the issue. The Center’s obesity-related research has garnered nearly 1,000 mentions in journalistic outlets, ranging from the Associated Press and *Axios* to National Public Radio and *Politico*. The researchers have also authored a number of op-eds for influential publications.

In addition, the Schaeffer Center partnered with the Bipartisan Policy Center to hold an in-person and virtual forum on increasing access to obesity therapies. The event featured Goldman, as well as experts from Johns Hopkins and the STOP Obesity Alliance, and was moderated by Rachel Cohrs Zhang, *STAT*’s chief Washington correspondent.

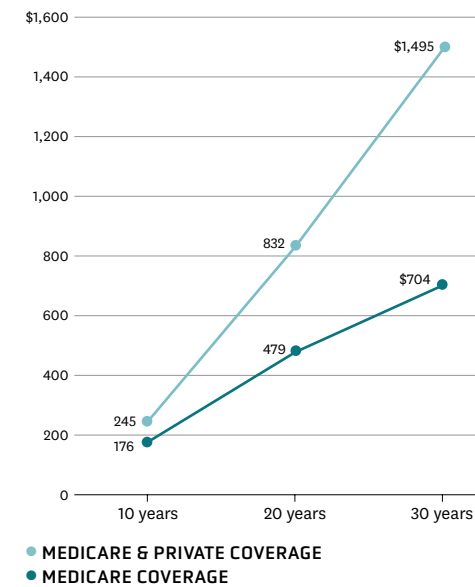
Informed by Schaeffer Center studies, Representatives Brad Wenstrup (R-Ohio) and Raul Ruiz (D-Calif.) reintroduced TROA in July 2023. If enacted, it would allow Medicare to pay for obesity treatments including nutritionists and dietitians as well as medications. A modified version of the bill, which would offer a more limited pathway to coverage, passed the House Ways and Means Committee in June 2024.

Another signal of the increased attention on this issue was when Representatives Vern Buchanan (R-Fla.) and Gwen Moore (D-Wis.) established a bipartisan Congressional Preventive Health and Wellness Caucus and announced obesity as a key focus.

“We’ve shown that these new treatments are a breakthrough for what has been an intractable public health problem,” Lakdawalla notes of the Schaeffer Center’s leading-edge research on obesity therapies. “And we would be remiss not to find some way to take advantage of these—and the other innovations that will probably come on their heels.”

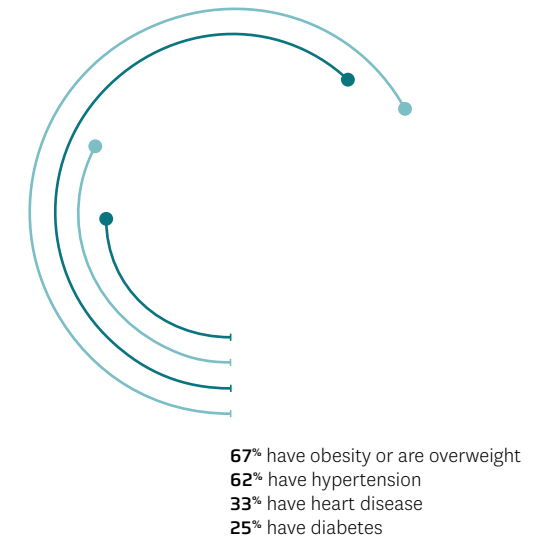
#### The value to Medicare from covering and treating obesity reaches \$1.5 trillion in 30 years if both Medicare and private insurance cover treatment

IN BILLIONS USD, TOTAL MEDICARE OFFSETS



#### Obesity and obesity-related diseases impact a large share of the Medicare population

U.S. POPULATION, AGE 65+



#### IMPROVING ACCESS TO GENE THERAPIES

Innovations in cell and gene therapies promise to improve life for countless people. But since the long-term benefits and risks of these potential breakthroughs are hard to forecast, financing such treatments can be precarious for their makers and payers. Building on more than a decade of developing and evaluating novel pricing structures, Schaeffer Center scholars responded to a request from U.S. Senator Bill Cassidy, MD (R-La.), for ways to protect and expand access to gene therapies for Americans with ultra-rare diseases. Cassidy is ranking member of the Senate Health, Education, Labor and Pensions (HELP) Committee.

Strategies identified include: enabling the creation of public or private intermediaries to manage financial risk, updating regulatory frameworks to foster contracts based on outcomes and value, and coupling generous coverage with predictable and transparent evaluations of value.

“Given that there are limited real-world data on the long-term health outcomes from gene therapies, outcomes-based contracts—in the form of drug mortgages or warranties—would mitigate some of the risk health plans and other payers face in financing these therapies,” wrote Darius Lakdawalla and colleagues in a report presented to the HELP Committee. The researchers explain that these contracts could take the form of a direct money-back guarantee or canceling any obligation to make continued installment payments.

Establishing third-party financial intermediaries would add security by ensuring that rebates or refunds would occur even if a patient changes payers after completion of treatment. The intermediaries would also uphold the bargain even when pharmaceutical firms lack the finances to make good on payments should therapies fail on a widespread basis.

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## EVALUATING DRUG PRICING POLICIES

### 2

#### CONGRESSIONAL HEARINGS

WITH SCHAEFFER  
EXPERT WITNESSES  
DISCUSSING WAYS  
TO IMPROVE THE  
INFLATION REDUCTION  
ACT TO BETTER ENSURE  
ACCESS FOR PATIENTS

The United States is the global engine of medical innovation, and public policies should support that progress while ensuring that vital new therapies are affordable and accessible. However, the blunt price controls in such legislation as the Inflation Reduction Act (IRA) risk undermining these goals. In congressional testimony, research articles and white papers, Schaeffer Center scholars offer more effective strategies for containing costs while rewarding new therapies according to their actual value in saving and improving lives.

Darius Lakdawalla has testified about pharmaceutical pricing before committees in both the U.S. House and Senate. “Better lives for patients and their families is the goal,” Lakdawalla told the House Ways and Means Subcommittee on Health. So instead of paying for all advances, the focus should be on rewarding companies that “seek out and develop new medicines that help us achieve healthier outcomes.”

Lakdawalla amplified the point when speaking to the Senate Committee on Health, Education, Labor and Pensions, adding that introducing European-style pricing policies would reduce Americans’ life expectancy. Indeed, drug price transparency, coupled

with better information about value, can help payers and consumers spend their money wisely.

Alice Chen framed the need for incentivizing innovation in terms of rare diseases when testifying before the House Energy and Commerce Subcommittee on Health. “For rare diseases, treatment options are often limited, and new drug developments can provide hope to patients and families,” Chen said. Noting the importance of the Orphan Drug Act in offsetting the financial risks of developing rare-disease therapies, she explained that the IRA’s limitations on exempting these treatments from its price negotiation requirements may ultimately hinder progress.

#### MITIGATING UNINTENDED CONSEQUENCES

Schaeffer Center researchers have also met directly with congressional staff and representatives from the Centers for Medicare & Medicaid Services (CMS) and Congressional Budget Office to discuss remedying the IRA’s negative consequences. These strategies were detailed in an influential white paper by Dana Goldman, Joe Grogan, Erin Trish and colleagues.

The suggestions include: bringing transparency and a focus on value to the price-determination

#### SENATOR BILL CASSIDY

(R-LA.) CITED  
SCHAEFFER WORK  
ON THE INSULIN  
CAP DURING A  
SENATE FINANCE  
HEARING

#### INSULIN AFFORDABILITY

Even as the Schaeffer Center offered improvements to the Inflation Reduction Act (IRA), its researchers noted that some aspects of the law may expand access for patients by reducing costs at the pharmacy counter. A study co-authored by Rebecca Myerson and John A. Romley found that the IRA’s capping of insulin costs at \$35 led to increases in prescription fillings among Medicare Part D enrollees. Meanwhile, the number of insulin fills decreased for those with no Medicare coverage. The analysis, published in the *Journal of the American Medical Association*, suggests that Medicare beneficiaries filled about 50,000 more insulin prescriptions per month, and about 20,000 of these fills would not have taken place without the IRA.

process; encouraging investment in clinical trials by delaying negotiations when new information is generated; and, when new evidence about a drug’s real-world effectiveness is determined, allowing exceptions to the requirement that manufacturers pay CMS rebates if prices increase faster than inflation. The authors also propose using a three-part-pricing framework developed at the Schaeffer Center whereby medications would launch at relatively low prices that would increase or decrease according to their demonstrated effectiveness—before ultimately falling as biosimilar and generic versions enter the marketplace.

“More transparency around value assessment will improve the Department of Health and Human Services’ price negotiation process,” Goldman says.

Through a number of articles and op-eds, Schaeffer researchers have called public attention to the IRA’s limitations. Writing in *The Wall Street Journal*, Grogan noted that numerous companies canceled drug-development programs after the IRA was announced. In addition to highlighting the disincentives for new cancer treatments and rare-disease medications, Grogan observed that the legislation undercuts such innovation-spurring policies as the Orphan Drug Act and Food and Drug Administration Modernization Act. The IRA, he concluded, should be replaced “with an approach that recognizes the need for economic incentives to bring new treatments to patients.”

Then, in response to a CMS request, Goldman was joined by more than 20 fellow experts in offering further approaches to improving the IRA’s drug-negotiation program. Among the suggestions are: establishing more rigorous standards for assessing clinical evidence; placing a greater emphasis on therapeutic benefits as defined by patients instead of manufacturers; and adopting a more deliberative, transparent process that engages a wider range of

experts and stakeholders—including those patients affected by the therapies under review.

In addition to the IRA’s highest-profile component—the drug price negotiation program—the legislation implemented reforms to the Part D prescription drug benefit. Trish and colleagues at the Center are evaluating these changes and how their various components interact to alter incentives throughout the entire drug-distribution system.

#### MODEL OF GRACE

In articles and the book *Valuing Health*, published by Oxford University Press, Lakdawalla suggests augmenting three-part pricing with Generalized Risk Adjusted Cost-Effectiveness (GRACE), which he developed with Charles Phelps as a more effective means of calculating the value of care than current cost-effectiveness analyses. GRACE adheres to the economic truth that goods are more valuable when they are scarcer. Similarly, therapies offer greater value for people with disabilities, terminal illnesses or other severe diseases than to those in better health. One of the laudable aims of the IRA is to be nondiscriminatory, but the legislation is unclear about how to achieve it. Writing with colleagues in *Health Affairs Forefront*, Lakdawalla suggested that CMS administrators implementing the IRA drug price negotiation program should measure a technology’s value in terms of health improvements to patients using value-based metrics like GRACE.

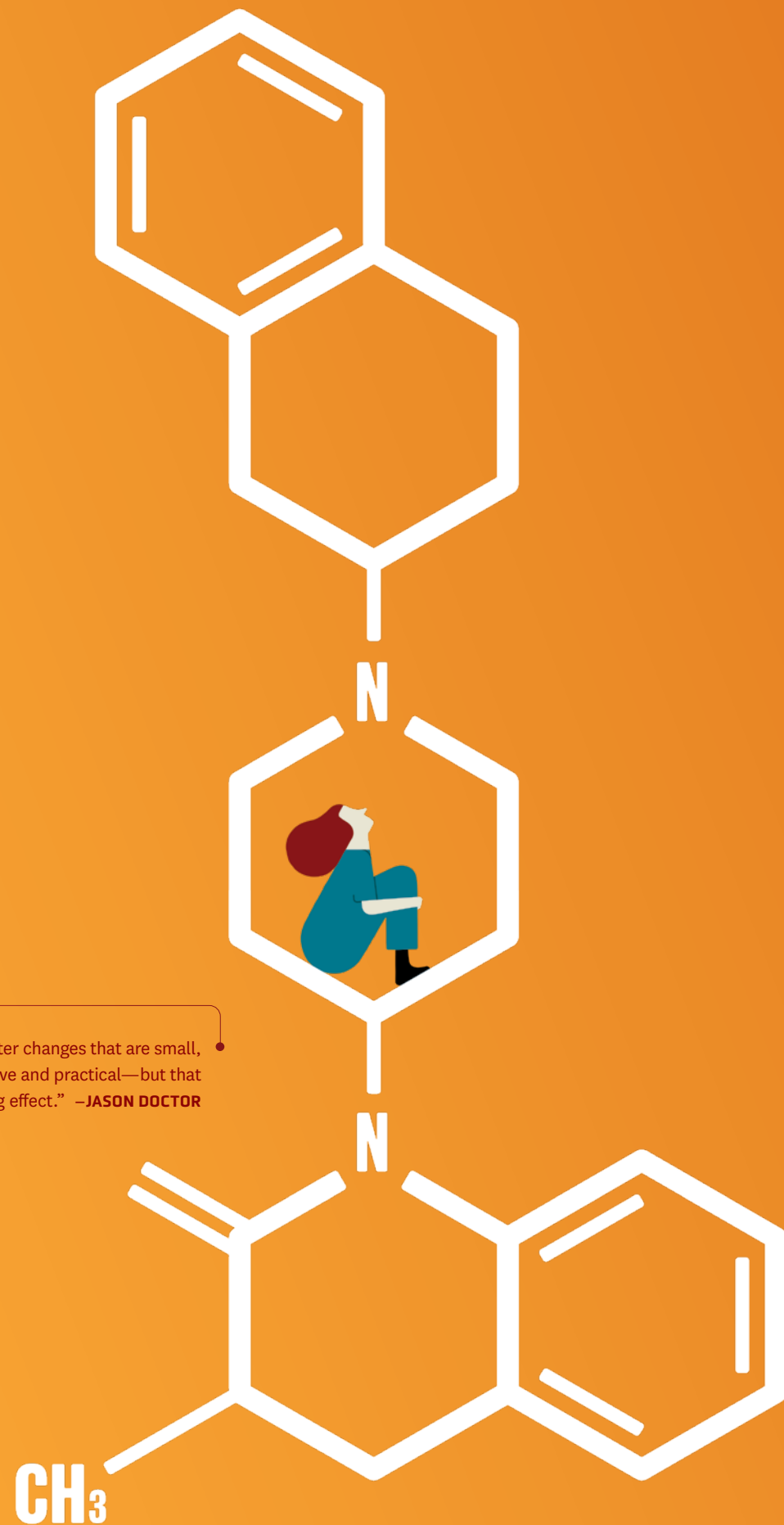
“The Schaeffer Center has a foundation of rigorous, academic research that is peer-reviewed and published in top journals. But it doesn’t stop there,” Chen notes of how Center scholars engage policymakers with their findings. “It’s really fulfilling to know that the research that we do can actually make a difference by shaping policy discourse.”

## 22.5k

VIEWS & DOWNLOADS  
OF THE SCHAEFFER  
WHITE PAPER  
ON THE DRUG  
PRICE PROVISIONS  
OF THE IRA

## 15

PRIVATE BRIEFINGS  
WITH CONGRESSIONAL  
& AGENCY STAFF  
ABOUT IMPLEMENTING  
THE IRA



“Our focus is to foster changes that are small, inexpensive and practical—but that can have a big effect.” —**JASON DOCTOR**

## TREATING SUBSTANCE USE WITH PUBLIC POLICY

### 500%

**INCREASE**

IN THE AVERAGE OUT-OF-POCKET PRICE FOR A SINGLE DOSE OF NALOXONE BETWEEN 2014 & 2018

### 60%

OF PHARMACIES REPORTED HAVING BUPRENORPHINE/NALOXONE IN STOCK

From the opioid epidemic to cannabis legalization, Schaeffer Center research results in policies to better understand and address the hazards of substance use. Schaeffer scholars’ findings and strategies continue to inform policymakers about these vital issues locally, nationally and internationally.

Rosalie Liccardo Pacula’s longstanding research in this area emphasizes the need to consider the larger picture rather than taking the typical siloed approach. She co-chairs the National Academies of Sciences, Engineering and Medicine’s Forum on Mental Health and Substance Use Disorders.

A recent study she conducted with colleagues from RAND Corporation found that attempts to solve one aspect of the opioid crisis may exacerbate challenges in another. For example, public housing policies that exclude substance users aim to protect other residents, but housing instability remains a significant barrier to successful treatment and recovery. Likewise, criminalization makes it harder to access employment and social services, discouraging “individuals with opioid use disorder from identifying themselves and seeking help,” the authors wrote.

### REDUCING OVERDOSE DEATHS

When an overdose occurs, the easily administered treatment naloxone can be a lifesaver by reversing the opioid’s effects to restore breathing. But as a study co-authored by Pacula shows, the average out-of-pocket price for naloxone increased by over 500% between 2014 and 2018—from \$35 to \$250 for a single dose. The price rise is especially troubling given that opioid-related deaths grew to nearly 81,000 in 2021 alone.

Pacula suggests requiring pharmacies to carry naloxone as well as capping its price for the uninsured to the same average cost for the insured. This would be vital, as 1 in 5 non-elderly adults with opioid use disorder lack coverage.

Responding to such findings, Representative Annie Kuster (D-N.H.) introduced the Naloxone Affordability Act. Kuster also joined with Senator Edward J. Markey (D-Mass.) to address the issue in the STOP Fentanyl Overdoses Act of 2023.

### REMOVING BARRIERS TO TREATMENT

Buprenorphine is a crucial treatment for opioid dependence and approved for prescription in outpatient settings, including through telehealth. Yet, as revealed by Dima Qato’s research spanning 32 states, only about 60% of pharmacies reported buprenorphine/naloxone in stock, she and colleagues noted in a study published in *JAMA Network Open*.

“Pharmacies aren’t required to carry these drugs,” Qato says. “And there’s a lot of concern that filling such prescriptions could trigger a suspicious-order alert by suppliers and drug-monitoring programs.” The resulting lack of buprenorphine and naloxone also “disproportionately affects communities of color,” she notes.

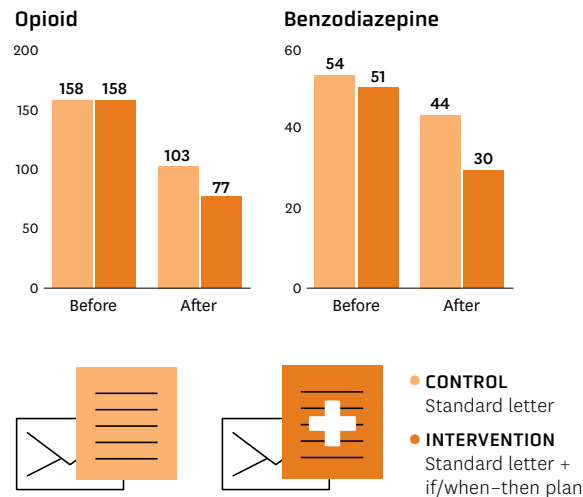
Qato and colleagues offered ways of overcoming these obstacles in *JAMA Health Forum*. Their suggested policy changes include: exempting buprenorphine from the Controlled Substances Act and other dispensing regulations for opioid use disorder; protecting suppliers, pharmacies and pharmacists from liability; and reforming responsibility and red-flag guidelines.

## GUIDANCE MAY REDUCE RISK

Prior USC Schaeffer Center research found that notifying doctors of a patient’s fatal overdose reduced opioid prescriptions. A new study compares opioid prescriptions among clinicians who received a standard notification letter (control) and clinicians who received a letter with additional planning guidance (intervention).

### Average weekly amount of prescriptions before and after invention

The results show the additional planning guidance reduced prescriptions of opioids by 26.21 mg, or a reduction of 13%. There was also evidence of spillover to more judicious benzodiazepine prescribing.



In addition, Qato urges policymakers to consider dispensing mandates and requiring that wholesalers distribute and pharmacies stock sufficient quantities of buprenorphine to meet public need. “Mandates are not always good, but for some medications and services—especially when the government is providing reimbursement—they could be helpful in ensuring pharmacies stock and dispense medications to people who really need them when it’s a matter of life and death,” she adds.

Based on such findings, Congress removed the X-waiver requirement with passage of the Mainstreaming Addiction Treatment Act. However, Qato notes, barriers to accessing these vitally needed medications still exist.

## ENCOURAGING CAREFUL PRESCRIBING

While his colleagues focus on major policy changes, Jason Doctor applies a more surgical approach to reducing opioid use disorder. “Our focus is to foster changes that are small, inexpensive and practical—but that can have a big effect,” Doctor says.

Doctor’s approach nudges physicians toward more judicious prescribing practices and away from relying on opioids and other hazardous drugs. For a study in *Nature Communications*, he added prescription guidance to letters notifying physicians of when a patient has died of an overdose. “Physicians tend to see patients who are doing well enough to return to their clinic,” Doctor notes. “They don’t necessarily see the patients who overdose or who may be too embarrassed to come back, so they don’t necessarily know when someone’s died.”

The results showed that physicians receiving notifications with specific planning guidance reduced prescriptions of opioids by nearly 13%. They also reduced prescriptions of anti-anxiety benzodiazepines by more than 8%. Together, opioids and benzodiazepines constitute the bulk of prescription drug overdoses.

The research builds on two previous studies. In the first, Doctor found that physicians reduced opioid prescriptions by 10% in the three months following notification of a fatal overdose. The second demonstrated that physicians reduced opioid prescriptions by 7% one year after receiving a notification. The letter used in these previous studies served as the control in Doctor’s more recent work.

“You have to be gentle,” Doctor says of the letters, “because we’re not trying to blame physicians.” In an op-ed for *MedPage Today*, he amplified that point, calling for a “deprescribing plan” that presents “a specific path for reducing, and then eliminating, opioid use even before the first prescription is written.”

In other research, Doctor teamed with Kaiser Permanente to test on-screen prompts for decreasing long-term opioid prescriptions while increasing orders for naloxone. When prescribing opioids, physicians receive alerts that explain the risks of such prescribing, remind clinicians to order naloxone, and list recommended actions that clinicians can choose to follow or override. The results showed a 23% drop in opioid prescriptions and 27% increase in prescriptions for naloxone.

Doctor’s nudges have been implemented by agencies in California, Kentucky, Maryland, Massachusetts, Oregon and other states. One of his strategies—having physicians post pledges to follow proper prescription guidelines—has proved so effective that it is labeled a “best practice” by the Centers for Disease Control and Prevention.

## INFORMING CANNABIS POLICIES

Cannabis is now legal for recreational use in 24 states, with an additional 14 permitting its medical applications. Yet safety and regulatory concerns remain—especially given the enhancements the industry makes to strengthen its product. “The cannabis plant is relatively harmless,” Pacula notes. “But in California the industry is reinforcing pre-rolled joints with synthetic THC, and people have also learned

how to extract concentrated cannabinoids that have much larger effects than the natural plant would.”

Pacula’s studies have shown rises in cannabis-related emergency department visits due to vomiting, psychosis and schizophrenia in Colorado, where the drug was legalized in 2012. In addition, cannabis edibles can take forms appealing to children. Another Pacula study found that many California cannabis dispensaries have inadequate screening procedures for keeping minors out of their premises.

“Allowing the industry unrestricted freedom to develop new products can allow them to target young and vulnerable audiences who are at greater risk of becoming lifelong heavy users,” Pacula said while presenting her research at a United Nations event. In addition, before Germany legalized cannabis, its policymakers called on Pacula to share her findings. Her other service on the global front includes a term as president of the International Society for the Study of Drug Policy.

“I think these countries are listening, and they’re being more cautious in the products they’re allowing,” Pacula says.

Back in the U.S., Pacula and colleagues responded to a congressional request for information about cannabidiol (CBD). “Policymakers should consider the regulatory experiences that we have observed from tobacco, vaping products, alcohol and prescription drug industries when considering the regulation of CBD for nonmedical use,” they wrote.

“The genie’s out of the bottle, and it’s not going away,” Pacula says. “We just need to get the genie tamed.”

## CONTAINING HIV

Taking pre-exposure prophylaxis (PrEP) daily protects from HIV, the virus that triggers AIDS. However, a study by Dima Qato and colleagues revealed that more than half of commercially insured patients discontinued PrEP therapy within the first year—suggesting that individuals still face obstacles to long-term PrEP adherence or may lack knowledge about their HIV risk.

The study builds on more than a decade of Schaeffer Center research demonstrating the value of HIV/AIDS therapies in saving money and lives. This includes the landmark finding that early treatment led to \$80 billion in life-expectancy gains and prevented 188,000 people from contracting the virus between 1996 and 2009.

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STATES

HAVE LEGALIZED CANNABIS FOR EITHER RECREATIONAL OR MEDICAL USE

150+

MEDIA MENTIONS

OF THE SCHAEFFER WHITE PAPER ARGUING FOR PUBLIC HEALTH REGULATIONS OF CANNABIS

300

JOURNAL ARTICLES  
& WHITE PAPERS  
AUTHORED BY  
SCHAEFFER SCHOLARS  
FROM 2023–2024

58

OP-EDS & BLOG POSTS  
FROM 2023–2024

The backbone of the Schaeffer Center is rigorous, bold research that leads to evidence-based, informed policy solutions that are sustainable and ultimately improve health. The following pages feature a few select op-eds, public comment letters, white papers and studies that had impact in 2023–2024.

“The solution we recommend is to measure a technology’s value in terms of health improvements to patients and then use this quantity to set [maximum fair price].”

–DARIUS LAKDAWALLA ET AL., *Health Affairs Forefront*

“The estimated toll on the nation’s gross domestic product is twice that of the Great Recession, 20 times that of the 9/11 terrorist attacks and at least 40 times that of any other disaster to befall the country in the 21st century.”

–JAKUB HLÁVKA & ADAM ROSE, *Los Angeles Times*

“Eliminating insurance for generics might make patients nervous at first, but the payoff would be stable and affordable prices. An opaque, profit-generating structure that provides no value for patients would be stripped away.”

–ERIN TRISH & KAREN VAN NUYS, *The Washington Post*

“The authors’ recommendations have the goal of building public confidence and stakeholder buy-in through rigor and reliable application to CMS decision-making.”

–DANA GOLDMAN ET AL., *CMS Comment Letter*

## Dissemination Highlights

### OP-EDS AND MEDIA MENTIONS

**The Conversation:** “Buyouts Can Bring Relief From Medical Debt, but They’re Far From a Cure,” Erin Duffy

**Health Affairs Forefront:** “Favorable Selection Ups the Ante on Medicare Advantage Payment Reform,” Steve Lieberman and Paul Ginsburg

**Health Affairs Forefront:** “A Strategy for Value-Based Drug Pricing Under the Inflation Reduction Act,” Jason Shafrin, Darius N. Lakdawalla, Jalpa A. Doshi, Louis P. Garrison Jr., Anup Malani, Peter J. Neumann, Charles E. Phelps, Adrian Towse and Richard J. Willke

**The Hill:** “Four Ways to Make Drug Price Negotiations Work for Everyone,” Dana Goldman and Darius Lakdawalla

**The Hill:** “How the Secrecy of Middlemen Inflates Drug Prices,” Neeraj Sood and Karen Van Nuys

**The Hill:** “The Inflation Reduction Act’s Harms Go Beyond Drug Pricing—They’re Threatening Your Medicare,” Joseph Grogan

**Los Angeles Times:** “‘Unprecedented by Most Measures’: Calculating the Astonishing Economic Costs of COVID,” Jakub Hlávka and Adam Rose

**MedPage Today:** “Without Early Detection, Fighting Dementia Is an Uphill Battle,” Julie Zissimopoulos

**STAT:** “Congress Can Eradicate Hepatitis C and Reduce the Deficit at the Same Time,” Neeraj Sood and Jagpreet Chhatwal

**STAT:** “Medicare Coverage of Weight Loss Drugs Could Save the U.S. Billions of Dollars,” Dana Goldman and Alison Sexton Ward

**The Washington Post:** “Ending Health Insurance for Generic Drugs Would Save Patients Money,” Erin Trish and Karen Van Nuys

**The Wall Street Journal:** “The Agency Keeping Alzheimer’s Drugs From Patients,” Joseph Grogan

### COMMENT LETTERS

**Centers for Medicare & Medicaid Services (CMS):** “The Inflation Reduction Act’s Drug Price Negotiation Program,” Dana Goldman, Charles E. Phelps, Darius Lakdawalla, Joseph Grogan, Karen Van Nuys, Barry Liden, William Padula, Peter J. Neumann, Louis P. Garrison, Diana Brixner, Beth Devine, Daniel C. Malone, David J. Vanness, Dan Ollendorf, James D. Chambers, Julia F. Slejko, Manish K. Mishra, R. Brett McQueen, Emmanuel F. Drabo, Joseph F. Levy, David D. Kim, Kelly E. Anderson, Jeromie Ballreich and Vasco M. Pontinha

“As scientists, we usually wait for clear scientific evidence before guiding policy reforms, but we feel it necessary to act because the industry is moving ahead of the science assuming that new product formulations derived from the plant are safe because the plant appears to be safe.”

–ROSALIE LICCARDO PACULA, SEEMA PESSAR & MYFANWY GRAHAM, U.S. Congress Comment Letter

“Medicare coverage of weight-loss therapies would save federal taxpayers as much as \$245 billion in the first 10 years of coverage alone, if private insurers were to follow Medicare’s lead.”

–ALISON SEXTON WARD ET AL., Schaeffer Center White Paper

“Hospitals and health systems should collaborate with other health ecosystem participants to develop a shared vision of health.”

–NANCY-ANN DEPARLE ET AL., Schaeffer Center White Paper

**CMS:** “Proposed Guidance on Coverage With Evidence Development,” Alice Chen, Joseph Grogan, Mireille Jacobson, Geoffrey Joyce, Darius Lakdawalla, Barry Liden, Eugene Lin, Karen Van Nuys, William Padula, Alison Sexton Ward and Julie Zissimopoulos

**Consumer Financial Protection Bureau:** “Medical Payment Products,” Erin Duffy, Erin Trish and Samantha Randall

**Congressional Budget Office:** “New Research on Obesity,” Dana Goldman, Darius Lakdawalla, Karen Van Nuys, Alison Sexton Ward, Bryan Tysinger and Barry Liden

**U.S. Congress:** “Regulating Cannabidiol,” Rosalie Liccardo Pacula, Seema Pessar and Myfanwy Graham

**U.S. Senate Committee on Health, Education, Labor and Pensions:** “Improving Americans’ Access to Gene Therapies,” Darius Lakdawalla, Joseph Grogan, Stephanie Hedt, Barry Liden, Erin Trish and Karen Van Nuys

#### WHITE PAPERS

“Cancer-Related Technologies Have Changed a Lot. So Should Cancer Screening,” Dana Goldman, Darius Lakdawalla and Karen Van Nuys

“Benefits of Medicare Coverage for Weight-Loss Drugs,” Alison Sexton Ward, Bryan Tysinger, PhuongGiang Nguyen, Dana Goldman and Darius Lakdawalla

“Fixing Medicare Advantage With Competitive Bidding,” Paul Ginsburg and Steve Lieberman

“Medicare Advantage Enrolls Lower-Spending People, Leading to Large Overpayments,” Steve Lieberman, Paul Ginsburg and Samuel Valdez

“Mitigating the Inflation Reduction Act’s Adverse Impacts on the Prescription Drug Market,” Dana Goldman, Joseph Grogan, Darius Lakdawalla, Barry Liden, Jason Shafrin, Kyi-Sin Than and Erin Trish

“The Evolving Role of Hospitals and Health Systems in Community Health and Emergency Preparedness,” Nancy-Ann DeParle, Sister Carol Keehan, Erin Trish, Julian Harris, Mitchell Katz, Sandra Lindsay, Jonathan B. Perlin, Thomas M. Priselac, Scott Serota, Mike Trachta, Reed Tuckson, Melissa A. Frasco and Ruth Katz

#### JOURNAL ARTICLES

**Alzheimer’s & Dementia:** “Expanding the Use of Brief Cognitive Assessments to Detect Suspected Early-stage Cognitive Impairment in Primary Care,” Julie Zissimopoulos, Soeren Mattke and colleagues

**Health Affairs:** “Medicare Part D Plans Greatly Increased Utilization Restrictions on Prescription Drugs, 2011–20,” Geoffrey Joyce, Barbara Blaylock, Jiafan Chen and Karen Van Nuys

**Health Affairs:** “The Forgotten Middle: Worsening Health and Economic Trends Extend to Americans With Modest Resources Nearing Retirement,” Jack Chapel, Bryan Tysinger, Dana Goldman, Jack Rowe and the Research Network on an Aging Society

“Medicare Advantage enrollment increased by 22.2 million beneficiaries (337%) from 2006 through 2022, whereas traditional Medicare enrollment declined by 1 million (2.9%) over that period.”  
–ERIN TRISH ET AL., *Health Affairs*

“The dominant barrier [to prescribing inexpensive, lifesaving treatment for child diarrhea] was assuming that patients were uninterested, showing that simple interventions could save many lives.”  
–NEERAJ SOOD ET AL., *Science*



↑ Karen Van Nuys

**Health Affairs:** “Substantial Growth in Medicare Advantage and Implications for Reform,” Erin Trish, Samuel Valdez, Paul Ginsburg, Samantha Randall and Steven Lieberman

**Health Affairs:** “Cancer Drug Trastuzumab and Its Biosimilars Compete on Price for Market Share,” Alice Chen, Katrina Kaiser, Laura Gascue, Maria-Alice Manetas and Karen Van Nuys

**Health Economics:** “The Impact of COVID-19 Shelter-in-Place Policy Responses on Excess Mortality,” Virat Agrawal, Jonathan Cantor, Neeraj Sood and Christopher Whaley

**JAMA:** “Insulin Fills by Medicare Enrollees and Out-of-Pocket Caps Under the Inflation Reduction Act,” Rebecca Myerson, Dima Qato, Dana Goldman and John Romley

**JAMA Internal Medicine:** “Association of Intensive Lifestyle Interventions for Type 2 Diabetes With Labor Market Outcomes,” Peter Huckfeldt, Jeffrey Yu, Paul O’Leary, Ann Harada, Nicholas Pajewski, Chris Frenier, Mark Espeland, Anne Peters, Michael Bancks, Seth Seabury and Dana Goldman

**JAMA Network Open:** “Effect of Prescriber Notifications of Patient’s Fatal Overdose on Opioid Prescribing at 4 to 12 Months,” Jason Doctor, Emily Stewart, Roneet Lev, Jonathan Lucas, Tara Knight, Andy Nguyen and Michael Menchine

**JAMA Pediatrics:** “Duration of SARS-CoV-2 Culturable Virus Shedding in Children,” Neeraj Sood, Nikhilesh Kumar and Eran Bendavid

**Science:** “What Drives Poor Quality of Care for Child Diarrhea? Experimental Evidence From India,” Neeraj Sood, Zachary Wagner, Manoj Mohanan, Rushil Zutshi and Arnab Mukheri

**Nature Communications:** “A Randomized Trial Looking at Planning Prompts to Reduce Opioid Prescribing,” Jason Doctor, Marcella Kelley, Noah Goldstein, Jonathan Lucas, Tara Knight and Emily Stewart

#### CONGRESSIONAL TESTIMONY

**Pharmaceutical Pricing That Balances Innovation and Affordability for Patients With Rare Diseases:** Alice Chen before the House Energy and Commerce Subcommittee on Health

**Ensuring Affordable and Valuable Pharmaceutical Innovation for Americans:** Darius Lakdawalla before the Senate Committee on Health, Education, Labor and Pensions

**An Overview of Pharmacy Benefit Managers:** Erin Trish before the California Assembly Select Committee on Biotechnology

**Examining Policies That Inhibit Innovation and Patient Access:** Darius Lakdawalla before the House Ways and Means Subcommittee on Health

**Pharmacy Benefit Managers and the Prescription Drug Supply Chain:** Karen Van Nuys before the Senate Committee on Finance

**Bringing Transparency and Accountability to Pharmacy Benefit Managers:** Erin Trish before the Senate Committee on Commerce, Science and Transportation



## Events & Seminars

A key part of achieving the Schaeffer Center’s mission is engaging thought leaders, policymakers and the public in conversations about improving value in health. High-impact events—online, on campus and across the country—allow the Center to reach broad audiences and share its research and insights. Following are a few highlights from January 2, 2023, to June 30, 2024.



THE NEW D.C. CAPITAL CAMPUS PROVIDES INCREASED OPPORTUNITIES TO BUILD CONNECTIONS & HOST EVENTS

60<sup>ft<sup>2</sup></sup><sub>k</sub>

IN THE NEW USC CAPITAL CAMPUS, INCLUDING A DEDICATED SCHAEFFER FLOOR WITH A STATE-OF-THE-ART BOARD-ROOM AND CONFERENCE SPACE

7

CONVENINGS WITH STAKEHOLDERS & LAWMAKERS HOSTED BY SCHAEFFER AT THE NEW USC CAPITAL CAMPUS



↑ Alice Chen (left) and Darius Lakdawalla (right) testify before congressional committees. Dana Goldman (middle) speaks during an event hosted by The Hill.

### PUBLIC EVENTS

#### Avoiding Cannabis Chaos: Better Policies and Strategies for a Legal Market

Since cannabis was legalized in certain states, concern has grown about corruption, crime, environmental degradation and labor abuse—while an explosion of high-potency products, from vapes to gummies and ice cream, is raising health concerns. In partnership with the USC Price School of Public Policy, the Schaeffer Center hosted a panel to debate how to better regulate the cannabis market to protect consumers and hold the industry accountable.

- Moderator **Mireille Jacobson, PhD**, senior scholar and co-director, Aging and Cognition Program, USC Schaeffer Center; associate professor, USC Leonard Davis School of Gerontology
- **Jim McDonnell**, director, Safe Communities Institute, USC Price School of Public Policy; former sheriff, Los Angeles County
- **Rosalie Liccardo Pacula, PhD**, Elizabeth Garrett Chair in Health Policy, Economics and Law, USC Price School of Public Policy; senior scholar, USC Schaeffer Center; co-director, RAND-USC Schaeffer Opioid Policy Tools and Information Center of Excellence
- **Mona Zhang**, cannabis policy reporter, *Politico*

#### The Forgotten Middle: Exploring Life Expectancy Outcomes Among the Lower-Middle Class

Life expectancy in the U.S. is shorter than in all other high-income countries, and lower-middle-class Americans are projected to live shorter lives with more health and economic challenges compared to

upper-middle-class Americans. The Schaeffer Center was invited by the Urban Institute to participate in a discussion of the causes and potential policy solutions to curb this trend.

- **Jack M. Chapel, PhD**, postdoctoral scholar, USC Schaeffer Center
- **Jung Hyun Choi, PhD**, principal research associate, Housing Finance Policy Center, Urban Institute
- **Wendell Primus, PhD**, visiting fellow, Center on Health Policy, Brookings Institution
- **David Rehkopf, MPH, ScD**, associate professor of epidemiology and population health, Stanford University
- **John W. Rowe, MD**, Julius B. Richmond Professor of Health Policy and Aging, Mailman School of Public Health, Columbia University
- **Tisamarie Sherry**, deputy assistant secretary for behavioral health, disability and aging policy, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services
- **Erwin Tan, MD**, director, Thought Leadership-Health, AARP
- **Sarah Rosen Wartell, JD**, president, Urban Institute

#### Medicare and Drug Pricing: Time to Think Differently

The landmark 2022 Inflation Reduction Act has helped people with Medicare save on healthcare costs for vaccines and insulin, but, as with anything in Washington, that’s not the full story. *The Hill* and the Alliance for Aging Research invited the Schaeffer Center to participate in a discussion of the changing landscape of Medicare.

“The way to save money is to keep people out of the hospital. That’s what drugs do when they work best. ... Yet we are negotiating those prices and, at the same time, we are not solving preventive healthcare issues that will drive disparity and costs.”

—DANA GOLDMAN  
at *The Hill* event on Medicare & drug pricing

- **Jennifer Ellis, MD**, co-chair, Health and Public Policy Committee, Association of Black Cardiologists
- **Dana Goldman, PhD**, co-director, USC Schaeffer Center for Health Policy & Economics; founding director, USC Schaeffer Institute for Public Policy & Government Service; University Professor of Public Policy, Pharmacy and Economics, USC
- **Rep. Mariannette Miller-Meeks, MD (R-Iowa)**, member, House Energy and Commerce Subcommittee on Health
- **Rep. Scott Peters, JD (D-Calif.)**, member, House Energy and Commerce and House Budget committees
- **Joe Ruffolo**, senior vice president and general manager, *The Hill*
- **Steve Scully**, contributing editor, *The Hill*
- **Daneen Sekoni, MHA**, vice president, policy and advocacy, Cancer Support Community
- **Michael Ward, MS**, vice president, public affairs and government relations, Alliance for Aging Research

#### Obesity in the U.S.:

##### Increasing Access to Treatment

More than 4 in 10 adults have obesity. While new treatments are available, Medicare and private insurers cover very few, leaving many patients without the care they want and need. In partnership with the Bipartisan Policy Center, this event discussed why policymakers should consider the value of increased investment in obesity-treatment efforts.

- Moderator **Rachel Cohrs**, Washington correspondent, *STAT*
- **Cristy Gallagher, MPA**, associate director of research and policy, STOP Obesity Alliance, Milken Institute School of Public Health, The George Washington University; coordinator, Obesity Care Advocacy Network
- **Dana Goldman, PhD**, co-director, USC Schaeffer Center for Health Policy & Economics; founding director, USC Schaeffer Institute for Public Policy & Government Service; University Professor of Public Policy, Pharmacy and Economics, USC
- **Kimberly Anne Gudzone, MD, MPH**, chief medical officer, American Board of Obesity Medicine Foundation
- **Anand Parekh, MD**, chief medical adviser, Bipartisan Policy Center

#### Shuttered Pharmacies:

##### A Major Hole in Healthcare

Nearly 1 in 4 U.S. neighborhoods lacks convenient access to pharmacies, and hundreds of pharmacies close their doors every year, contributing to persistent racial and ethnic health disparities. In partnership with the USC Mann School of Pharmacy and Pharmaceutical Sciences, the Schaeffer Center brought together experts to discuss causes and solutions for pharmacy deserts.

- Moderator **Karen Van Nuys, PhD**, executive director, Value of Life Sciences Innovation program, USC Schaeffer Center
- **Rep. Diana Harshbarger (R-Tenn.)**, member, House Energy and Commerce Committee
- **Ronna Hauser, PharmD**, senior vice president of policy and pharmacy affairs, National Community Pharmacists Association
- **Dima Qato, PharmD, MPH, PhD**, senior scholar, USC Schaeffer Center; Hygeia Centennial Chair, USC Mann School of Pharmacy and Pharmaceutical Sciences

#### Third Annual Science of Alzheimer’s Disease and Alzheimer’s Disease Related Dementias (AD/ADRD) for Social Scientists Program

This unique two-day series of annual lectures features nationally recognized interdisciplinary experts in AD/ADRD, who share recent breakthroughs in Alzheimer’s therapies, risk factors, biomarkers and genetics. This year’s lecturers were:

- **Jennifer A. Ailshire, PhD**, scholar, USC Schaeffer Center; assistant professor, USC Leonard Davis School of Gerontology
- **Paul Aisen, MD**, professor of neurology and director, Alzheimer’s Therapeutic Research Institute, Keck School of Medicine of USC
- **David A. Bennett, MD**, Robert C. Borwell Professor of Neurological Science, Department of Neurological Sciences, Rush University
- **Helena Chang Chui, MD**, Raymond and Betty McCarron Chair in Neurology and professor, Keck School of Medicine of USC
- **Maria M. Corrada-Bravo, ScD, ScM**, professor of neurology, School of Medicine, University of California, Irvine (UCI); professor, UCI Institute for Memory Impairments and Neurological Disorders

- **Eileen Crimmins, PhD**, senior scholar, USC Schaeffer Center; associate dean and AARP Professor of Gerontology, USC Leonard Davis School of Gerontology
- **Sean Curran, PhD**, James E. Birren Chair in Gerontology and professor of gerontology, and vice dean of faculty and research, USC Leonard Davis School of Gerontology
- **Stefania Forner, PhD**, director, medical and scientific relations, Alzheimer’s Association
- **Neda Jahanshad, PhD**, associate professor, neurology and biomedical engineering, Keck School of Medicine of USC
- **Jessica Langbaum, PhD**, senior director, research strategy, Banner Health
- **Jennifer J. Manly, PhD**, professor of neuropsychology, Gertrude H. Sergievsky Center, and Taub Institute for Research on Alzheimer’s Disease and the Aging Brain, Columbia University
- **Priscilla Novak, PhD, MPH**, program officer, Division of Behavioral and Social Research, National Institute on Aging
- **David B. Reuben, MD**, chief, Division of Geriatric Medicine, UCLA David Geffen School of Medicine
- **Julie Zissimopoulos, PhD**, co-director, Aging and Cognition Program and senior scholar, USC Schaeffer Center

#### POLICY COFFEE CHATS

Policy Coffee Chats convened by the Schaeffer Center feature federal staff members and policymakers in discussion with healthcare stakeholders for small-group conversations around healthcare policy and ways to better collaborate. Recent topics have included:

- Improving budget modeling to estimate policy impacts on drug innovation and long-term health
- Addressing the medical debt crisis
- Developing a patient-centered approach to valuing new technologies
- Analyzing trends in Medicare Advantage

#### SEMINAR SERIES

The Schaeffer Center Seminar Series features prominent academics and researchers discussing timely themes in health policy and economics. The seminars, which prioritize informal discussions with compelling speakers in front of an audience, have recently featured:

- **Katherine Carman, PhD**, senior financial economist, Office of the Investor Advocate, U.S. Securities and Exchange Commission
- **Christopher “Kitt” Carpenter, PhD**, E. Bronson Ingram University Distinguished Professor of Economics and Health Policy; professor of law; professor of leadership, policy and organizations; professor of medicine, health and society; professor of gender and sexuality studies, Vanderbilt University
- **Jorge Luis Garcia, MA, PhD**, assistant professor and Powers Emerging Fellow, Wilbur O. and Ann Powers College of Business, Clemson University
- **Lorens A. Helmchen, PhD**, associate professor, health policy and management, Milken Institute School of Public Health, The George Washington University
- **Inmaculada “Inma” Hernandez, PhD**, professor, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California, San Diego
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- **Katherine Meckel, PhD**, associate professor of economics, University of California, San Diego
- **Maggie Shi, PhD**, assistant professor, Harris School of Public Policy, University of Chicago; faculty research fellow, National Bureau of Economic Research
- **Boris Vabson, PhD**, Seidman Fellow and associate, Department of Health Care Policy, Harvard Medical School; nonresident scholar, USC Schaeffer Center
- **Adriana Corredor Waldron**, assistant professor of economics, Poole College of Management, North Carolina State University

120+

SEMINARS HOSTED  
SINCE 2009

# Data & Microsimulation



**T**he Schaeffer Center’s evidence-based analysis and predictive modeling are backed by big data and a team of experts in programming, microsimulation modeling, data management, statistics and more. Center scholars and students rely on these leading-edge resources for a diverse range of impactful projects. Programmers in the Center’s data core maintain a library that includes survey data, public and private claims, contextual data and electronic health network data

**15**  
PROGRAMMERS, STATISTICIANS & DATA SCIENTISTS MAKE UP THE MICROSIMULATION & DATA TEAMS

feeds. The data core maintains this vital yet sensitive information using the most exacting security possible—from air-gapped computing to state-of-the-art, Health Insurance Portability and Accountability Act (HIPAA)-compliant systems with 24/7 monitoring to ensure data protection.

### MODELING THE FUTURE

Since its beginning, the Schaeffer Center has been at the forefront of developing innovative economic/demographic microsimulation tools to effectively model future health trends and answer crucial health policy questions. The cornerstone of this research is the Future Elderly Model (FEM), which turns data from a representative panel of nearly 20,000 Americans into forecasts of health and economic outcomes for the U.S. population ages 50 and older. Survey participants’ information is updated every two years, allowing issues to be studied across the lifespan.

Schaeffer Center investigators employ the FEM to explore a range of matters—including the benefits of early Alzheimer’s interventions, the pharmaceutical distribution chain and the importance of diversity in clinical trial recruitment, to name just a few examples related to our nation’s physical and financial wellbeing.

The FEM’s robustness makes it unparalleled in the scope of questions it can address. “Other research groups in the U.S.

**20+**

COUNTRIES ARE PART OF THE FEM NETWORK, BUILDING COUNTRY-SPECIFIC MICROSIMULATION MODELS USING THE INFRASTRUCTURE DEVELOPED AT SCHAEFFER

**110+**

PUBLICATIONS UTILIZE THE FEM INFRASTRUCTURE

use microsimulation models, but they tend not to cover as many topics as we do,” says Bryan Tysinger, who directs the health policy microsimulation program.

Tysinger and colleagues have built upon the FEM’s success by extending its demographic coverage to the entire U.S. adult population through the Future Adult Model (FAM). Among other projects, the FAM has been used to demonstrate the value of anti-obesity drugs, as well as in studies by Nobel Laureate James Heckman evaluating the impact of early childhood education on lifetime health outcomes.

### FORGOTTEN MIDDLE

In an especially impactful FEM study, Tysinger, Dana Goldman and Schaeffer postdoc Jack Chapel examined the situations of middle-class Americans nearing retirement. The scholars found that the health status of 50-year-olds in this income category has worsened over the past two decades—with the wellbeing of the lower middle deteriorating faster than the upper middle.

The analysis, published in *Health Affairs*, drew attention to what the research team calls the “forgotten middle,” whose needs are overlooked by policymakers. People in this demographic fail to qualify for Medicaid, housing vouchers or supplemental nutrition assistance, but they may also lack the funds to cover the increasing costs of healthcare and housing.

“Our study projects that lower-middle Americans will spend a longer proportion of remaining life with significant healthcare needs, but with no more economic resources to attend to those needs than similar cohorts had 20 years earlier,” Goldman notes.

“The public conversation about inequality tends to focus on the challenges faced by only the most vulnerable populations,” Tysinger adds. “But our models found that there has been an important divergence in the middle of the economic distribution.”

### GLOBAL TO LOCAL

The microsimulation team continues to build a global network of collaborators who are developing country-level FEM-based models in nations around the world. More than 20 countries—from North America to Europe and Asia—are part of this network. A current project focuses on modeling the costs and implications of Alzheimer’s disease and related dementias (ADRD). The effort enables researchers to compare demographic, health and economic trends on a global scale—and is increasingly important given the world’s aging population and rising ADRD rates.

Models have also gone local, with simulations conducted for California and Los Angeles County to help policymakers at the state and county levels understand trends and the impact of policy decisions. Modelers are also evaluating urban-rural disparities

and other demographic trends across the country.

Findings using the FEM and FAM have been published in top journals and cited—or commissioned—by government agencies, the White House, the National Academies of Sciences, Engineering and Medicine, and private organizations interested in aging policy. For example, the White House’s Build Back Better plan cited two papers that used the Schaeffer Center’s microsimulation modeling. Ultimately, these microsimulations help legislators at all levels weigh the pros and cons of potential policies when deciding where to put resources.

### DATA PARTNERSHIPS

In addition to serving as a resource for Schaeffer Center researchers, the data core and microsimulation team join with local, state, federal and international collaborators to develop data projects and models. Key partners include the National Academies of Sciences, Engineering and Medicine and the Los Angeles County Department of Public Health.

# Research Training Programs

In partnership with the USC Mann School of Pharmacy and Pharmaceutical Sciences and USC Price School of Public Policy, the USC Schaeffer Center prepares the next generation of health policy researchers to bring innovation and expertise to higher education, government, healthcare and research institutions. Through its research training programs, the Center has developed a network of scholars from throughout the U.S.

## **NATIONAL INSTITUTES OF HEALTH-FUNDED PILOT OPPORTUNITIES** **USC Alzheimer's Disease Resource Center for Minority Aging and Health Economics Research**

Aiming to increase the number, diversity and academic success of junior faculty who are focusing their research on the health and economic wellbeing of minority elderly populations, the USC Alzheimer's Disease Resource Center for Minority Aging and Health Economics Research has cultivated 30 early-career scholars since its launch in 2012. The interdisciplinary faculty has the support and expertise to advance research in pathways through which social, behavioral, environmental and economic factors—as well as policies and health systems—affect disparities in the risk of Alzheimer's disease and related dementias and impact the health, healthcare and economic outcomes of people living with dementia. The research center is funded through a grant from the National Institute on Aging with additional support from the

USC Office of the Provost, Price School of Public Policy and Leonard Davis School of Gerontology. Collaborating centers include the USC Roybal Center for Behavioral Interventions in Aging, USC Edward R. Roybal Institute on Aging, USC Roybal Center for Financial Decision Making and Financial Independence in Old Age, USC Alzheimer Disease Research Center, and USC/UCLA Center on Biodemography and Population Health.

## **USC Center for Advancing Sociodemographic and Economic Study of Alzheimer's Disease and Related Dementias**

An interdisciplinary research center established through a partnership with the Schaeffer Center, University of Texas at Austin Population Research Center and Stanford Health Policy, the USC Center for Advancing Sociodemographic and Economic Study of Alzheimer's Disease and Related Dementias (CeASES-ADRD) works to advance innovative social science research in ADRD, increase and diversify the number of researchers working in the field, and disseminate findings for impact. Funded through the National Institutes of Health, this mission is accomplished through network meetings, workshops, pilot project support and the annual Science of ADRD for Social Scientists Program.

## **USC Roybal Center for Behavioral Interventions in Aging**

By developing and testing interventions based on insights from behavioral science to promote healthy aging, the USC Roybal

Center for Behavioral Interventions in Aging aims to strengthen the ability of clinicians to recommend the safest, most effective treatments for patients. The center conducts research that advances healthy aging for older adults who are economically insecure, culturally diverse and underserved by human services organizations. It funds pilot projects proposed by senior and junior researchers from academic and research institutions focused on the consequences of current patterns of practice and development of interventions that will improve care delivery, quality of care and value to aging adults.

## **ADDITIONAL OPPORTUNITIES**

### **Price School Diversity Initiative for Visiting Distinguished Scholars**

The USC Price School is partnering with Historically Black Colleges and Universities (HBCUs) as part of a pilot program to promote research, engage diverse populations, provide mentorship opportunities, foster dialogue among faculty and students, and bring innovative work to the school's research centers. Scholars have the opportunity to partner with Schaeffer experts on issues related to health policy.

### **Clinical Scholars**

The clinical scholars program fosters collaboration between Schaeffer Center scholars and exceptional early-career clinical researchers and thought leaders. The program provides training and support for grants, papers and ongoing research projects.

100%

OF SCHAEFFER CENTER TRAINEES GO ON TO CAREERS IN HEALTHCARE OR HEALTH POLICY IN ACADEMIC, PRIVATE & PUBLIC-SECTOR ORGANIZATIONS



## **Predocctoral Fellowships**

Predocctoral students in related programs in the Mann School of Pharmacy and Pharmaceutical Sciences, Price School of Public Policy, and USC Dornsife College of Letters, Arts and Sciences conduct research under the guidance of a Schaeffer Center scholar, gaining knowledge and experience relevant to their doctoral program.

## **Postdoctoral Fellowships**

Scholars chosen for our prestigious postdoctoral fellowships focus completely on research, with no teaching requirement. They receive one-on-one mentoring to support development of their individual research agendas and collaborate with other Schaeffer Center researchers.

## **Assistantships**

Students from relevant disciplines—such as economics, public policy, health policy, statistics, medicine and psychology—work directly with Schaeffer Center scholars on specific research projects, attaining valuable experience and skills to further their research proficiency.

Through our programs, we develop innovators for positions in higher education,

research, government and healthcare. Distinctions include:

- One-on-one mentorship and opportunities to collaborate with distinguished investigators in the field
- Dedicated, full-time administrative and data support at the USC Schaeffer Center, and access to university-wide educational and career-development resources
- Sophisticated data-analysis tools and resources
- Numerous professional development opportunities, including support for grant writing, publication in peer-reviewed journals, and travel for attending and presenting at major conferences
- Assistance in securing influential positions in prestigious academic, public and private settings

For more information, please reach out to:

*Erin Duffy, PhD, MPH*  
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*Briana Taylor, MNLM*  
Senior Program Administrator,  
Research Training Program  
[brianawh@usc.edu](mailto:brianawh@usc.edu)

## **PARTICIPANTS**

The postdoctoral scholar program has grown considerably over the past few years. The Center hosted 15 postdocs between January 1, 2023, and June 30, 2024, with backgrounds in 11 disciplines, including behavioral health, community nutrition, economics, gerontology, integrative biology and disease, management, neuropsychology, policy analysis, psychology, public policy and social policy.

- Brandeis University, Waltham, Mass.
- Cornell University, Ithaca, N.Y.
- Harvard University, Cambridge, Mass.
- Heinrich Heine University, Duesseldorf, Germany
- Howard University, Washington, D.C.
- RAND, Santa Monica, Calif.
- SWPS University of Social Science and Humanities, Warsaw, Poland
- Tulane University, New Orleans
- UCLA, Los Angeles
- University of California, Irvine
- University of Southern California, Los Angeles
- University of Utah, Salt Lake City

# Financial Report

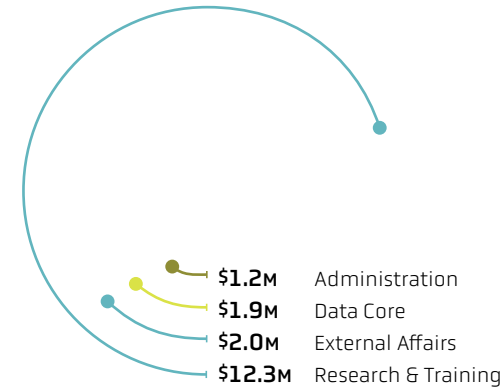
# 112

FEDERALLY FUNDED PROJECTS  
SPANNING TOPICS SUCH AS ALZHEIMER'S  
DISEASE, MEDICARE PART D, AGING  
& HEALTH DISPARITIES

For fiscal year 2023 (July 1, 2022–June 30, 2023), the Schaeffer Center funded \$17.4 million in operating expenses from \$16.3 million in current revenue. For fiscal year 2024 (July 1, 2023–June 30, 2024), the Center funded \$16.2 million in operating expenses from \$20 million in current revenue. The operating budget includes compensation for scholars and staff, programmatic expenses and general operating costs. Scholar salaries covered by the schools are not included in these totals, nor does university support include faculty salaries covered by the schools. Expenses by function are outlined in the graph at right. Since its inception, the Schaeffer Center has raised \$205 million.

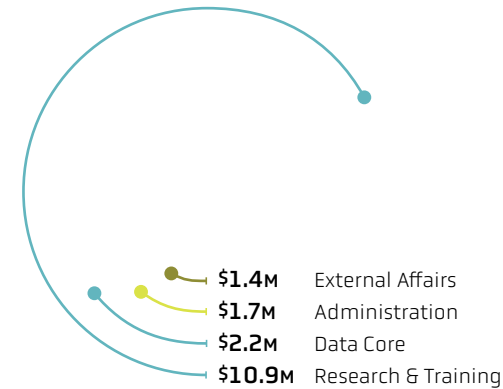
### OPERATING EXPENSES FY 2023

\$17.4 million



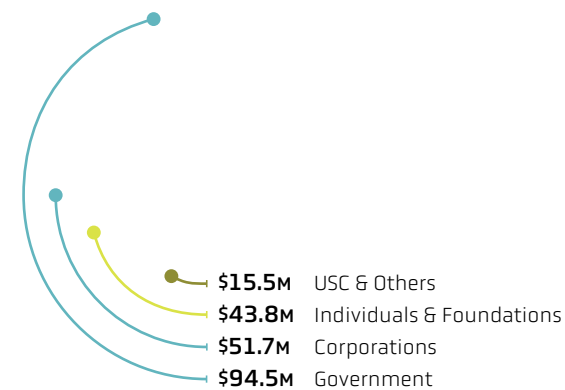
### OPERATING EXPENSES FY 2024

\$16.2 million



### REVENUE THROUGH JUNE 30, 2024

\$205.5 million



### CONFLICT OF INTEREST POLICY

The USC Leonard D. Schaeffer Center for Health Policy & Economics conducts innovative, independent research that makes significant contributions to policy and health improvement. Center experts pursue a range of priority research areas focused on addressing problems within the health sphere. Donors may request that their funds be used to address a general research priority area, including:

- Improve the performance of healthcare markets
- Foster better pharmaceutical policy and regulation
- Increase value in healthcare delivery
- Improve health and reduce disparities throughout the lifespan

Schaeffer Center funding comes from a range of sources, including government entities, foundations, corporations, individuals and endowment. At all times, the independence and integrity of the research is paramount, and the Center retains the right to publish all findings from its research activities. Funding sources are always disclosed. The Center does not conduct proprietary research.

As is the case at many elite academic institutions, scholars associated with the Schaeffer Center are sought for their expertise by corporations, government entities and others. These external activities (e.g., consulting) are governed by the *USC Faculty Handbook* and the university's Conflict of Interest in Professional and Business Practices and Conflict of Interest in Research policies. All outside activities must be disclosed via the university's online disclosure system, diSClose, and scholars must adhere to all measures put in place to manage any appearance of conflict.

# Supporters

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Numerous public and private funders provide grants, gifts and sponsorships that help advance the Schaeffer Center’s mission. Thank you!

Your generosity contributes to the work of the Schaeffer Center—from groundbreaking, multidisciplinary research to national conferences and fellowships—all of which helps fuel the pursuit of innovative solutions to improve healthcare delivery, policies and outcomes.

*The Schaeffer Center gratefully acknowledges the following fiscal year 2023 and 2024 supporters:*

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### Erin Trish, PhD

*Co-Director, USC Schaeffer Center; Associate Professor, USC Mann School of Pharmacy and Pharmaceutical Sciences*

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# About the USC Mann School

## USC MANN SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES

One of the top pharmacy schools nationwide and the highest-ranked private school, the USC Mann School of Pharmacy and Pharmaceutical Sciences continues its century-old reputation for innovative programming, practice and collaboration. The school was known as the USC School of Pharmacy until 2022, when it received a \$50 million endowment and was renamed on behalf of inventor and entrepreneur Alfred E. Mann.

The school created the nation's first Doctor of Pharmacy program, the first clinical pharmacy program and clerkships, the first doctorates in pharmaceutical economics and regulatory science, and the first PharmD/MBA dual-degree program, among other innovations in education, research and practice. The USC Mann School is the only private pharmacy school on a major health sciences campus, which facilitates partnerships with other health professionals as well as new breakthroughs in care. Uniquely, it owns and operates several community pharmacies; in 2024, it celebrated the grand reopening of its state-of-the-art, flagship pharmacy on the USC University Park Campus.

The school is home to the D. K. Kim International Center for Regulatory Science at USC, the Titus Center for Medication Safety and Population Health, and the Center for Quantitative Drug and Disease Modeling, and is a partner in the USC Leonard D. Schaeffer Center for Health Policy & Economics, the USC Institute for Biomedical Therapeutics, the Southern California Clinical and Translational Science Institute, and the USC Center for Drug Discovery and Development. The Mann School pioneered a national model of clinical pharmacy care through work in safety-net clinics throughout Southern California and is a leader in comprehensive medication management.

Vassilios Papadopoulos has served as dean since October 2016.



# About the USC Price School

## USC PRICE SCHOOL OF PUBLIC POLICY

Since 1929, the USC Sol Price School of Public Policy has defined excellence and innovation in public affairs education. Ranked fourth nationwide among 285 schools of public affairs, the Price School's mission is to improve the quality of life for people and their communities, here and abroad. For nine decades, the Price School has forged solutions and advanced knowledge, meeting each generation of challenges with purpose, principle and a pioneering spirit.

The school's three pillars—social and healthcare policy, governance and urban development—cut across 16 interdisciplinary research centers and six primary fields of study: health policy and management, public policy, public management, nonprofit leadership, urban planning and real estate development. With interconnected yet distinct disciplines housed under one roof, the Price School brings multiple lenses to bear on critical issues.

Solving societal issues of such complexity requires not only great minds but also great action. USC Price fosters collaboration and

partnerships to better understand problems through varied perspectives. The school uses the influence of California and greater Los Angeles as a resource for setting new paradigms. These challenges also call on a new generation of creative thinkers to explore beyond the status quo. The school's graduates go on to shape our world as leaders in government, nonprofit agencies and the private sector.

Genevieve Giuliano is interim dean, succeeding Dana Goldman—Schaeffer Center co-director and founding director of the Schaeffer Institute—who served as dean from July 2020 until June 2024.



# About the USC Schaeffer Center

## **USC LEONARD D. SCHAEFFER CENTER FOR HEALTH POLICY & ECONOMICS**

The Leonard D. Schaeffer Center for Health Policy & Economics was established in 2009 at the University of Southern California through a generous gift from Leonard and Pamela Schaeffer. The Center reflects Mr. Schaeffer's lifelong commitment to solving healthcare issues and transforming the healthcare system.

Improving our healthcare system requires creative solutions, robust research methods and expertise in a variety of fields. A collaboration between the USC Price School of Public Policy and the USC Mann School of Pharmacy and Pharmaceutical Sciences, the Schaeffer Center brings together health policy experts, a seasoned pharmacoeconomics team, faculty from across USC—including the Keck School of Medicine, the Dworak-Peck School of Social Work and the Viterbi School of Engineering—and affiliated researchers from other leading universities to solve the pressing challenges in healthcare.

Since its inception, the Schaeffer Center has become known as one of the world's top health policy research organizations. On a global stage, it consistently ranks among the top five in academic citations and is a recognized nonpartisan voice in helping shape public health policy. Center research is highly regarded on both sides of the aisle and used by Democratic and Republican presidents, Congress, the Congressional Budget Office, the Federal Reserve Board and other key agencies in their decision making.

The Schaeffer Center offers the human and technical capacity necessary to conduct breakthrough interdisciplinary research and exceptional policy analysis, with more than 85 scholars investigating a wide array of topics. Through partnerships with scholars and universities across the country and around the world, coupled with an unparalleled infrastructure and data resource collection, the Schaeffer Center has built a hub for health economics and policy work. The Schaeffer Center actively engages in developing excellent research skills in new investigators who can become innovators of the future while supporting the next generation of healthcare leaders in creating strong management, team building and communication skills.

The Schaeffer Center's vision is to be the premier research and educational institution recognized for innovative, independent research that makes significant contributions to policy and health improvement. Its mission is to measurably increase value in health through data-driven policy solutions, research excellence, and private and public-sector engagement. With an extraordinary breadth and depth of expertise, the Schaeffer Center has a vital impact on the positive transformation of healthcare.

The Schaeffer Center is one of two flagship programs at the Leonard D. Schaeffer Institute for Public Policy & Government Service, formed in 2024 to develop evidence-based solutions to policy issues and educate future generations of public service leaders.



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