also constrained by the fact that most firms choose to settle patent disputes rather than litigate to final judgment.

Terminal disclaimers have helped catalyze the current large drug patent portfolios built of secondary patents. Reducing the size of patent thickets should facilitate market entry of generic and biosimilar drugs closer to the expiration of the patent on the underlying active ingredient or other meaningful innovation, thereby improving competition and patient access to affordable drugs.

S. Sean Tu, JD, PhD
Aaron S. Kesselheim, MD, JD, MPH
Bernard Chao, JD

Author Affiliations: West Virginia University College of Law, Morgantown (Tu); Division of Pharmacoepidemiology and Pharmacoeconomics, Brigham and Women's Hospital, Boston, Massachusetts (Kesselheim); University of Denver Sturm College of Law, Denver, Colorado (Chao).

Accepted for Publication: July 3, 2024.

Published Online: August 12, 2024. doi:10.1001/jama.2024.14350

Corresponding Author: S. Sean Tu, JD, PhD, West Virginia University College of Law, 101 Law School Dr, Morgantown, WV 26506 (shine.tu@mail.wvu.edu).

Author Contributions: Dr Tu had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
Concept and design: Tu, Chao.
Acquisition, analysis, or interpretation of data: Tu, Kesselheim.
Drafting of the manuscript: Tu, Chao.
Critical review of the manuscript for important intellectual content: All authors.
Statistical analysis: Tu.
Obtained funding: Tu, Kesselheim.
Administrative, technical, or material support: Tu.
Supervision: Tu, Kesselheim.

Conflict of Interest Disclosures: Dr Tu reported consulting for purchasers of lenalidomide-containing products. Dr Kesselheim reported serving as an expert for individual plaintiffs in a case against Gilead relating to its tenofovir-containing products. No other disclosures were reported.

Funding/Support: The research of Drs Tu and Kesselheim is funded by Arnold Ventures and the Commonwealth Fund.

Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; or decision to submit the manuscript for publication.

Data Sharing Statement: See the Supplement.

Additional Contributions: We thank Matt Martin, MS, Program on Regulation, Therapeutics, and Law, Brigham and Women's Hospital, for help obtaining the PatentsView datasets, and Lisa Larrimore Ouellette, JD, PhD, Stanford University, for careful review of the manuscript. They received no compensation.

1. Kapczynski A, Park C, Sampat B. Polymorphs and prodrugs and salts (oh my!): an empirical analysis of "secondary" pharmaceutical patents. *PLoS One*. 2012;7(12):e49470. doi:10.1371/journal.pone.0049470

2. Tu SS, Goode R, Feldman WB. Biologic patent thickets and terminal disclaimers. *JAMA*. 2024;331(4):355-357. doi:10.1001/jama.2023.25389

3. Patent and Trademark Office. Terminal Disclaimer Practice to Obviate Nonstatutory Double Patenting: Notice of Proposed Rulemaking. *Federal Register*. May 10, 2024. Accessed June 29, 2024. https://www.federalregister.gov/documents/2024/05/10/2024-10166/terminal-disclaimer-practice-to-obviate-nonstatutory-double-patenting

4. Welch, Braun, and Klobuchar introduce bipartisan legislation to streamline drug patent litigation, lower cost of prescription drugs. Senator Peter Welch website. January 12, 2024. Accessed June 29, 2024. https://www.welch.senate.gov/welch-braun-and-klobuchar-introduce-bipartisan-legislation-to-streamline-drug-patent-litigation-lower-cost-of-prescription-drugs/

5. US Patent and Trademark Office. PatentsView. Updated April 22, 2024. Accessed June 29, 2024. https://patentsview.org/

6. US Patent and Trademark Office. Patent Examination Research Dataset (PatEx). Updated June 2023. Accessed July 25, 2024. https://www.uspto.gov/ip-policy/economic-research/research-datasets/patent-examination-research-dataset-public-pair

HEALTH AND THE 2024 US ELECTION

Leading Health-Related Concerns of Older Adults Before the 2024 Election

Adults 50 years or older cast more than half of all ballots in the 2020 US election.[1] Issues related to health and health care are often key factors for voters, particularly for older adults who typically have greater health needs than younger adults. To understand which health-related concerns are most salient before the 2024 election, we surveyed a nationally representative cohort of adults 50 years or older.

Supplemental content

Methods | The University of Michigan institutional review board deemed this study exempt and waived informed consent. The National Poll on Healthy Aging[2] is a recurring survey of adults 50 years or older conducted by the University of Michigan using the NORC AmeriSpeak[3] panel, a probability-based sample of the US household population with an initial recruitment rate of 15.9%. This survey, which focused on health-related concerns, was conducted online and by phone with a stratified random sample of adults 50 to 101 years old from February 22 through March 12, 2024.

The survey was designed by the research team based on focus groups and pilot testing with older adults to identify 26 health-related policy issues (Supplement 1). For each issue, participants were asked to rate their level of concern (very, somewhat, or not concerned) as older adults in their community. Participants' demographic characteristics were obtained via the survey or panel-supplied data.

We calculated weighted percentages and 95% CIs for participants who reported being "very concerned" about each issue, accounting for the complex survey design. Using logistic regression to adjust for demographic characteristics, we estimated weighted percentages of adults who were very concerned about the cost of medical care and prescription medications. Missing observations were dropped from the analysis (≤1.5% for each item). Analyses were conducted using Stata software version 18.1 (StataCorp) with a 2-sided ($P < .05$) significance threshold.

Results | Among 3626 adults invited to participate, 2576 (71.0%) completed the survey. The cohort included 1385 women (53.1%) and 1176 men (46.6%) with a mean (SD) age of 65.2 (9.5) years and median of 66 years (**Table 1**). The weighted percentages who reported being very concerned about each health issue for older adults in their community are presented in Table 1. Five of the top 6 concerns were related to costs of health care and health insurance, with 44.6% (95% CI, 42.9%-46.3%) to 56.3% (95% CI,

Table 1. Characteristics and Health-Related Concerns of US Adults Aged 50 Years or Older

Characteristic	No. of participants (n = 2576)	Weighted % (95% CI)
Age, y		
50-64	1192	53.5 (47.5-59.4)
65-101	1384	46.5 (40.6-52.5)
Gender identity		
Women	1385	53.1 (50.2-56.0)
Men	1176	46.6 (43.6-49.6)
Transgender or nonbinary	8	0.3 (0.2-0.5)
Race and ethnicity[a]		
Black, non-Hispanic	253	5.2 (4.7-5.8)
Hispanic	275	8.9 (7.7-10.3)
White, non-Hispanic	1914	77.1 (75.3-78.9)
Other, non-Hispanic	134	8.7 (7.5-10.2)
Education		
≤High school graduate	579	40.0 (37.1-43.1)
Some college	1089	28.5 (27.1-29.9)
Bachelor's degree	908	31.5 (28.2-34.9)
Annual household income, $		
<60 000	1263	49.1 (47.4-50.7)
≥60 000	1313	50.9 (49.3-52.6)
US Census region		
Northeast	359	19.2 (15.8-23.0)
Midwest	680	19.9 (17.9-22.1)
South	881	37.5 (35.7-39.3)
West	656	23.5 (21.1-26.0)
Political ideology		
Liberal	492	17.3 (14.9-19.9)
Moderate	1200	46.8 (44.7-49.0)
Conservative	833	35.9 (33.6-38.4)
Residential area		
Metropolitan	2167	84.0 (80.8-86.7)
Nonmetropolitan	409	16.0 (13.3-19.2)
Very worried about health-related concern		
Cost of home care, assisted living, nursing home care	1461	56.3 (53.7-59.0)
Cost of medical care	1443	56.2 (54.3-58.1)
Cost of prescription medications	1388	54.3 (52.6-55.9)
Financial scams and fraud	1377	52.8 (49.4-56.1)
Cost of health insurance and Medicare	1312	52.1 (50.2-54.1)
Cost of dental care	1122	44.6 (42.9-46.3)
Access to quality home care, assisted living, or nursing home care	983	38.1 (34.6-41.7)
Health care quality	870	33.7 (32.1-35.4)
Inaccurate or misleading health information	880	33.2 (31.6-34.8)
Access to affordable healthy foods	811	32.1 (29.9-34.3)
Poverty	826	31.2 (28.7-33.8)
Access to quality mental health care	784	29.2 (27.3-31.1)
Social isolation or loneliness	715	28.0 (26.2-29.8)
Being able to age in place	712	27.6 (25.4-29.8)
Unequal access to health care	694	26.9 (24.8-29.1)
Obesity	644	24.3 (22.4-26.2)
Neighborhood safety	624	24.1 (22.3-25.9)
Opioid or fentanyl use	558	21.6 (18.9-24.6)
Ageism or age discrimination	557	21.5 (19.5-23.5)
Stress or anxiety	548	21.2 (19.7-22.8)
Vaccine hesitancy	550	20.3 (18.4-22.4)
Health risks from polluted water and air	499	18.3 (17.0-19.6)
Racial and ethnic discrimination	519	18.0 (16.5-19.6)
Access to social and recreational activities	398	15.4 (14.1-16.8)
Alcohol use	300	11.2 (10.1-12.3)
Marijuana or cannabis use	264	10.6 (9.5-12.0)

[a] As reported by respondents using US Census categories. "Other, non-Hispanic" includes 60 respondents who identified as Asian, 10 as American Indian/Alaska Native, 4 as Native Hawaiian/Pacific Islander, 38 as more than 1 race, and 22 as a different race. Race and ethnicity were included in the study because health concerns may differ by these variables.

53.7%-59.0%) reporting they were very concerned about these issues; the other top concern related to financial scams and fraud (52.8% very concerned [95% CI, 49.4%-56.1%]). Substantially smaller proportions (10.6% [95% CI, 9.5%-12.0%] to 38.1% [95% CI, 34.6%-41.7%]) of older adults reported being very concerned about the other 20 issues.

In adjusted analyses (**Table 2**), the weighted percentages of older adults who reported being very concerned about medical care costs differed significantly between those aged 50 through 64 years (59.6% [95% CI, 57.4%-61.8%]) and 65 through 101 years (53.4% [95% CI, 50.9%-55.9%]; $P < .001$); women (59.3% [95% CI, 57.1%-61.5%]) and men (54.1% [95% CI, 51.5%-56.8%]; $P = .005$); liberals (68.2% [95% CI, 62.9%-73.6%]) vs moderates (56.4% [95% CI, 53.8%-59.0%]; $P < .001$), and moderates vs conservatives (51.4% [95% CI, 48.0%-54.9%]; $P = .03$); and those in metropolitan (55.9% [95% CI, 53.9%-57.8%]) and nonmetropolitan areas (61.7% [95% CI, 57.9%-65.4%]; $P = .01$). For prescription medication costs, percentages differed by gender, Hispanic ethnicity, US Census region, and political ideology.

Discussion | In this nationally representative survey regarding 26 prominent health-related issues, older adults reported being most concerned about costs of health care and health insurance for older adults in their community, as well as financial scams and fraud.[4] More than half of older adults in nearly all demographic groups reported being very concerned about the costs of medical care and prescription drugs, with significant differences by gender and political ideology. Women reported being more concerned than men, and liberal and moderate individuals more concerned than conservative individuals. In another 2024 national survey, 73% of adults of all ages reported being very or somewhat concerned about the cost of health care.[5]

Table 2. Weighted Percentages of US Adults Aged 50 Years or Older Very Concerned About the Cost of Medical Care and Prescription Medications

Characteristic	Very concerned about cost of medical care			Very concerned about cost of prescription medications		
	No.	Unadjusted % (95% CI)	Adjusted % (95% CI)[a]	No.	Unadjusted % (95% CI)	Adjusted % (95% CI)[a]
Age, y						
50-64	707	59.2 (56.8-61.6)	59.6 (57.4-61.8)	667	56.7 (54.2-59.1)	56.8 (54.1-59.5)
65-101	736	52.7 (49.9-55.6)	53.4 (50.9-55.9)[b]	721	51.5 (48.4-54.6)	52.4 (49.6-55.3)
Gender identity						
Women	802	59.1 (57.1-61.1)	59.3 (57.1-61.5)[c]	801	57.7 (55.2-60.2)	58.0 (55.7-60.2)[b]
Men	634	53.2 (50.2-56.1)	54.1 (51.5-56.8)	582	50.7 (48.1-53.3)	51.4 (48.9-53.9)
Transgender or nonbinary[d]						
Race and ethnicity						
Black, non-Hispanic	160	65.6 (59.2-71.4)	62.9 (55.3-70.4)	154	60.6 (54.9-66.0)	57.6 (51.5-63.7)
Hispanic	161	60.9 (54.6-66.9)	59.7 (53.4-65.9)	160	63.0 (56.7-68.9)	62.9 (57.0-68.9)[c]
White, non-Hispanic	1040	54.5 (51.9-57.0)	54.9 (52.8-57.0)	998	52.6 (50.8-54.4)	52.7 (50.9-54.6)
Other, non-Hispanic	82	61.5 (54.6-67.9)	61.7 (55.2-68.2)	76	56.4 (47.9-64.4)	57.5 (48.4-66.6)
Education						
High school graduate or less	329	56.8 (52.9-60.6)	57.1 (53.5-60.6)	326	56.2 (51.9-60.4)	56.1 (51.8-60.4)
Some college	601	55.6 (52.6-58.5)	56.6 (53.9-59.3)	564	50.7 (48.4-53.0)	52.3 (50.0-54.6)
Bachelor's degree	513	56.0 (53.6-58.4)	56.4 (53.3-59.6)	498	55.1 (50.4-59.6)	55.3 (49.8-60.9)
Annual household income, $						
<60 000	727	58.4 (56.0-60.8)	58.4 (56.0-60.8)	697	55.0 (51.9-58.0)	54.5 (51.1-57.9)
≥60 000	716	54.1 (51.5-56.8)	55.2 (52.6-57.8)	691	53.6 (51.4-55.8)	55.0 (52.2-57.8)
US Census region						
Northeast	200	54.6 (45.3-63.6)	54.8 (47.0-62.5)	202	56.1 (51.0-61.1)	56.0 (51.6-60.3)
Midwest	386	55.9 (51.4-60.4)	56.4 (51.9-60.9)	371	52.8 (48.7-56.8)	54.0 (50.3-57.7)
South	507	58.5 (55.0-61.9)	59.3 (55.8-62.8)	497	57.1 (54.3-59.9)	58.0 (55.3-60.7)
West	350	54.1 (50.0-58.1)	54.4 (49.5-59.3)	318	49.5 (46.4-52.6)	49.1 (45.7-52.5)[e]
Political ideology						
Liberal	315	67.6 (61.4-73.2)	68.2 (62.9-73.6)[b]	304	63.4 (56.5-69.7)	63.6 (57.8-69.3)[c]
Moderate	687	56.1 (53.5-58.6)	56.4 (53.8-59.0)	648	53.8 (51.3-56.4)	54.3 (51.7-56.8)
Conservative	414	50.6 (46.2-55.0)	51.4 (48.0-54.9)[e]	407	49.9 (46.8-53.1)	51.0 (48.0-53.9)
Residential area						
Metropolitan	1194	55.5 (53.2-57.7)	55.9 (53.9-57.8)	1161	54.2 (52.5-56.0)	54.7 (53.0-56.4)
Nonmetropolitan	249	60.1 (56.2-63.9)	61.7 (57.9-65.4)[e]	227	54.5 (49.8-59.0)	55.2 (51.1-59.4)

[a] Multivariable logistic regression was used to calculate predicted probabilities with adjustment for all listed characteristics. The reference categories included those aged 50 through 64 years; males; White, non-Hispanic; high school or less; less than $60 000 annual household income; Northeast; moderate political ideology; and metropolitan.

[b] $P < .001$.

[c] $P < .01$.

[d] Not reported due to sample size <10.

[e] $P < .05$.

Study limitations include the lack of data on personal health concerns and nonhealth issues that may influence older voters' preferences.

To engage older voters, candidates for president and Congress should prioritize communicating their plans for controlling health care costs.

John Z. Ayanian, MD, MPP
Matthias Kirch, MS
Dianne C. Singer, MPH
Erica Solway, PhD, MPH, MSW
J. Scott Roberts, PhD, MA
Nicholas Box, MPA
Jeffrey T. Kullgren, MD, MPH, MS

Author Affiliations: Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor (Ayanian, Kirch, Singer, Solway, Roberts, Box); Division of General Medicine, University of Michigan Medical School, Ann Arbor (Ayanian, Kullgren); Editor in Chief, *JAMA Health Forum* (Ayanian); Department of Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor (Roberts); Center for Clinical Management Research, Veterans Affairs Ann Arbor Healthcare System, Ann Arbor, Michigan (Kullgren).

Accepted for Publication: July 3, 2024.

Published Online: August 14, 2024. doi:10.1001/jama.2024.14353

Corresponding Author: John Z. Ayanian, MD, MPP, Institute for Healthcare Policy and Innovation, University of Michigan, 2800 Plymouth Rd, Ann Arbor, MI 48109 (ayanian@umich.edu).

Author Contributions: Dr Ayanian and Mr Kirch had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.
Concept and design: Ayanian, Singer, Solway, Roberts, Kullgren.

Acquisition, analysis, or interpretation of data: Ayanian, Kirch, Solway, Box, Kullgren.
Drafting of the manuscript: Ayanian.
Critical review of the manuscript for important intellectual content: Kirch, Singer, Solway, Roberts, Box, Kullgren.
Statistical analysis: Ayanian, Kirch, Box.
Obtained funding: Ayanian, Solway, Kullgren.
Administrative, technical, or material support: Singer, Solway.
Supervision: Ayanian, Solway, Kullgren.

Conflict of Interest Disclosures: Dr Ayanian reported receiving grants from Merck Foundation; personal fees from the JAMA Network, Harvard University, University of Massachusetts Medical School, University of California San Diego, and Emory University; and nonfinancial support from the National Academy of Medicine and the Academy of Health outside the submitted work; and having served on the board of directors of the Physicians Health Plan representing his employer, the University of Michigan, without additional compensation for this role. Dr Kullgren reported receiving grants from the HealthWell Foundation, Robert Wood Johnson Foundation, Donaghue Foundation, and Michigan Health Endowment Fund outside the submitted work and grants from the State of Michigan Department of Military and Veterans Affairs; receiving consulting fees from SeeChange Health, HealthMine, the Kaiser Permanente Washington Health Research Institute, and the Washington State Office of the Attorney General; and honoraria from the Robert Wood Johnson Foundation, AbilTo Inc, the Kansas City Area Life Sciences Institute, the American Diabetes Association, the Luxembourg National Research Fund, the Donaghue Foundation, the National Science Foundation, the University of California, Los Angeles, and the University of Pennsylvania. No other disclosures were reported

Funding/Support: This research was supported by AARP and Michigan Medicine and directed by the University of Michigan Institute for Healthcare Policy and Innovation. Support was also provided by the Department of Veterans Affairs, Veterans Health Administration, and Health Services Research and Development Service.

Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Disclaimer: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the US government. Dr Ayanian is Editor in Chief of *JAMA Health Forum* but was not involved in any of the decisions regarding review of the manuscript or its acceptance.

Data Sharing Statement: See Supplement 2.

1. Voting and registration in the election of November 2020. US Census Bureau. April 2021. Accessed June 27, 2024. https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-585.html

2. National Poll on Healthy Aging. University of Michigan Institute for Healthcare Policy and Innovation. Accessed June 27, 2024. https://www.healthyagingpoll.org/about-poll

3. Technical overview of the AmeriSpeak panel: NORC'S probability-based household panel. NORC at the University of Chicago. Updated February 8, 2022. Accessed June 27, 2024. https://amerispeak.norc.org/content/dam/amerispeak/research/pdf/AmeriSpeak%20Technical%20Overview%202019%2002%2018.pdf

4. Kullgren J, Solway E, Roberts S, et al. National poll on healthy aging: experiences with scams among older adults. University of Michigan Institute for Healthcare Policy and Innovation. November 2023. Accessed June 27, 2024. https://deepblue.lib.umich.edu/handle/2027.42/191449

5. Kearney A, Montero A, Valdes I, Kirzinger A, Hamel L. KFF health tracking poll February 2024: voters on two key health care issues: affordability and ACA. Published February 21, 2024. Accessed June 27, 2024. https://www.kff.org/affordable-care-act/poll-finding/kff-health-tracking-poll-february-2024-voters-on-two-key-health-care-issues-affordability-and-aca/

COMMENT & RESPONSE

Race, Gender, and Donor Heart Acceptance

To the Editor Cardiac transplant is a lengthy process informed by social determinants of health and race-based differences. A recent study[1] revealed that Black candidates had lower cumulative incidence of heart offer acceptance by transplant center teams compared with White candidates, and offer acceptance was higher for women than for men.[1]

The authors used the United Network for Organ Sharing datasets and included adults listed for heart transplant from 2018 to 2023.[1] This period included the COVID-19 pandemic, during which time transplant programs had resource challenges.[2] Moreover, many centers in the US reserved active status on the transplant waiting list only for patients with high waitlist mortality and illness severity during the COVID-19 pandemic.[3] A study of 22 997 patients reported that young Black recipients had a high risk of mortality in the first year after transplant, which may have been attributed to more severe illness and comorbidity prior to cardiac transplant.[4] Hence, we question how the COVID-19 pandemic influenced equitable heart transplant after listing.

Furthermore, we would like to know why the authors of this study[1] did not consider geographical variation when explaining their findings. A study that used data from the United Network for Organ Sharing database reported that transplant centers with the most active waitlists had lower waitlist mortality.[5] Although this study assessed waitlist mortality and cardiac transplant outcomes, it highlighted the substantial differences in transplant performance among states across the US. We therefore are curious to know if some transplant team centers located in certain parts of the US had differential race and gender disparities in heart transplant allocation.

Hamnah Majeed, HBSc, MSc, MA
Haris Majeed, HBSc, MSc
Renzo Cecere, MD

Author Affiliations: Faculty of Medicine and Health Sciences, McGill University, Montreal, Quebec, Canada (Hamnah Majeed); Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada (Haris Majeed); Division of Cardiac Surgery, McGill University Health Centre, Montreal, Quebec, Canada (Cecere).

Corresponding Author: Haris Majeed, HBSc, MSc, Institute of Medical Science, University of Toronto, One King's College Cir, Toronto, ON M5S1A8, Canada (haris.majeed@utoronto.ca).

Published Online: August 12, 2024. doi:10.1001/jama.2024.13720

Conflict of Interest Disclosures: None reported.

1. Breathett K, Knapp SM, Lewsey SC, et al. Differences in donor heart acceptance by race and gender of patients on the transplant waiting list. *JAMA*. 2024;331(16):1379-1386. doi:10.1001/jama.2024.0065

2. Loupy A, Aubert O, Reese PP, Bastien O, Bayer F, Jacquelinet C. Organ procurement and transplantation during the COVID-19 pandemic. *Lancet*. 2020;395(10237):e95-e96. doi:10.1016/S0140-6736(20)31040-0

3. DeFilippis EM, Farr MA, Givertz MM. Challenges in heart transplantation in the era of COVID-19. *Circulation*. 2020;141(25):2048-2051. doi:10.1161/CIRCULATIONAHA.120.047096

4. Maredia H, Bowring MG, Massie AB, et al. Better understanding the disparity associated with Black race in heart transplant outcomes: a national registry analysis. *Circ Heart Fail*. 2021;14(2):e006107. doi:10.1161/CIRCHEARTFAILURE.119.006107

5. Akintoye E, Shin D, Alvarez P, Briasoulis A. State-level variation in waitlist mortality and transplant outcomes among patients listed for heart transplantation in the US from 2011 to 2016. *JAMA Netw Open*. 2020;3(12):e2028459. doi:10.1001/jamanetworkopen.2020.28459