MEASURING DISTRIBUTIVE INJUSTICE ON A DIFFERENT SCALE

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I

INTRODUCTION

A comprehensive examination of distributive injustice within the U.S. health care system should move well beyond quantitative measures of differences in the flow of finances to acquire health care services. It requires a more concentrated emphasis on differences in health outcomes[1] for lower-versus higher-income Americans and the key non-financial factors that produce them.[2] Specifically, this article highlights the importance of education as a powerful contributor to significant differences in health outcomes. Expanding our vision to capture factors—such as education—outside the narrow scope of conventional health care financing and delivery provides an opportunity to discover better targeted policy interventions to narrow the existing income inequality in overall health outcomes.

Part II of this article explains the evidence that education may be a powerful driver of disparities in health outcomes. Part III illustrates how a more limited distributional analysis of health-services spending in recent studies of the Medicare program has produced sharply conflicting conclusions on whether Medicare financing is regressive or progressive.[3] Part IV then offers a possible

This article is also available at http://law.duke.edu/journals/lcp.

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1. The most basic measures of health outcomes involve changes in life expectancy and health status. They may also extend beyond more detailed measures of mortality and morbidity in general, to include measures linked to specific health conditions or medical treatments (i.e., did the patient's health get better or worse following a particular course of treatment for a particular medical condition?).

2. This article will not directly address a different theory of race-based disparities in health care, which emphasizes bias, prejudice, and discrimination within the doctor–patient relationship. *See* UNEQUAL TREATMENT: CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTH CARE (Brian D. Smedley, Adrienne Y. Stith & Alan R. Nelson eds., 2002). For a different view of the factors behind health disparities, see JONATHAN KLICK & SALLY SATEL, THE HEALTH DISPARITIES MYTH (2006).

3. The largest portion of Medicare expenditures—primarily for hospital care in the Hospital Insurance ("HI"), or Part A, portion of the program—is financed through a flat-rate payroll tax. From the program's inception in 1965 through 1990, the maximum amount of wages subject to the payroll tax for Medicare purposes was capped at the same level used for Social Security (old age, survivors, and disability insurance) financing. The maximum tax base was indexed to rise each year in proportion to the annual increase in average wages. In 1991, the maximum tax base for Medicare's HI program was raised to $125,000 (from a level of $51,300 in 1990). After the HI maximum tax base rose to $135,000 in 1993, in line with annual wage-indexing adjustments, the cap on taxable earnings for Medicare purposes was removed, beginning in 1994. The pre-1991 method to finance Medicare HI expenditures was

reconciliation of these studies by focusing on the differences in health outcomes that various types of Medicare beneficiaries experience, rather than on the levels of health care spending that they receive. And finally, Part V builds on the preceding findings to suggest how policy interventions may be retargeted to be more effective in narrowing income-related gaps in health.

II

PREDICTING DISPARITIES IN HEALTH
OUTCOMES: EDUCATION AS A KEY VARIABLE

If the search for distributive injustice in health care is redirected from focusing on how much health care different parties receive (spending) to how well the overall health care system improves or maintains their health (outcomes), the role of socioeconomic variables other than income in producing different levels of health becomes more apparent.[4] The importance of relative levels of educational attainment, in particular, comes to the forefront.

A long line of empirical studies that helps to explain how variables other than access to, or consumption of, health care services have more power in predicting health outcomes (and health disparities) centers on the Grossman model of health care consumption.[5]   For purposes of examining health disparities and distributive-justice issues, the updated and condensed version provided below illustrates that health care is only one of many inputs into the health-production function; other nonmedical factors—such as exercise, nutrition, health-related behaviors, and social norms—account for much more of the variance in predicting health outcomes.   Hence, disparities in the consumption of health care itself, let alone the financing of health insurance, may have little effect on health disparities.

"regressive" in the sense that workers who earned wages below the maximum tax base paid a higher percentage of their earnings as payroll taxes than workers with larger amounts of earnings above the tax cap. The post-1993 system of "uncapped" payroll-tax financing for Medicare remains somewhat regressive in the sense that other sources of income generally received in greater amounts by higher income individuals—such as capital gains and dividend income—are not subject to the payroll tax imposed on wages. Medicare's other primary sources of financing apply to its Supplementary Medical Insurance program, or Part B. Medicare Part B is financed through a combination of beneficiary premiums and general revenue, with the latter accounting for roughly seventy-five percent of Part B expenditures. Since that program's inception in 1965, Part B premiums were charged at the same amount for all beneficiaries, although setting higher Part B premiums for very high-income beneficiaries (income-related premiums) will begin in 2007.

    4. One might even borrow for health care the Copernican metaphor recently used to sketch out a modernized view of antitrust policy, but in this case recognize that Copernican policy analysis should revolve around health outcomes rather than the Ptolemaic view centered on health spending inputs. *See* William M. Sage & Peter J. Hammer, *A Copernican View of Health Care Antitrust*, 65 LAW & CONTEMP. PROBS. 241 (Autumn 2002).

    5. For the model's initial formulation, see Michael Grossman, *On the Concept of Health Capital and the Demand for Health*, 80 J. POL. ECON. 223 (1972); for a thorough summary of its evolution and updated application, see Barak D. Richman, *Behavioral Economics and Health Policy: Understanding Medicaid's Failure*, 90 CORNELL L. REV. 705 (2005).

Grossman compares one's health capital to a stock.[6] What one initially inherits will depreciate with age, but it can be increased or maintained by investment choices.[7] Investments in health may include such variables as medical-care utilization, diet, exercise, cigarette smoking, and alcohol consumption.[8] Of particular note here, he finds that the quantity of health demanded may rise with education (years of schooling) because more-educated people are more-efficient producers of health.[9] Grossman's extensive review of the literature, as of 1997, concludes that one's education level is the most important correlate of good health—more important than socioeconomic factors like occupation or income.[10] Moreover, education may change tastes or time preferences in a manner that encourages future-oriented behavior and favors health relative to other commodities.[11]

The Grossman model's emphasis on the link between education levels and health outcomes is supported by the finding of Adriana Lleras-Muney that one additional year of education increases life expectancy at age thirty-five by 1.7 years.[12] She concludes that income returns to education substantially underestimate overall returns, which include non-monetary benefits such as better health.[13]

One particular way in which increased levels of education improve health appears to be through preventing the onset of disease. James Smith finds that additional schooling is strongly and statistically predictive of the onset of both major and minor diseases over an eight-year period for pre-retirees.[14] On the other hand, financial measures such as household wealth and household income

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6. Michael Grossman, *The Human Capital Model*, *in* 1A HANDBOOK OF HEALTH ECONOMICS 347 (Anthony J. Culyer & Joseph P. Newhouse eds., 2000).

7. *Id.* at 350.

8. *Id.*

9. *Id.* at 396. Grossman suggests that there are two forms of such efficiency. First, more-educated people demonstrate productive efficiency by obtaining a larger health outcome ("outputs") from given amounts of the health services ("inputs") they choose. Second, schooling increases and improves information about the true effects of the inputs on health (for example, smoking or diet) and the better allocative efficiency of more-educated people will improve their health to the extent it leads to the selection of a better mix of health inputs. More-educated people are likely to respond more rapidly when new information about the effects of health care inputs becomes available. *Id.* at 396–97.

10. *Id.* at 395–97.

11. *Id.* at 397–404. *See also* Michael Grossman & Robert Kaestner, *Effects of Education on Health*, *in* THE SOCIAL BENEFITS OF EDUCATION 69 (Jere R. Behrman & Nevzer Stacey eds., 1997). In other words, more-educated people not only use the health care system more effectively, they also demand more from it. Their returns from additional "investments" in health care are more valuable to them in terms of their time preferences and opportunity costs.

12. Adriana Lleras-Muney, *The Relationship Between Education and Adult Mortality in the United States*, 72 REV. ECON. STUD. 189, 215 (2005).

13. *Id.* Although her study is limited to analyzing the effects of increasing education from relatively low initial levels through compulsory education laws, Lleras-Muney notes "that the benefits of education are large enough to consider education policies more seriously as a means to increase health, especially in light of the fact that other factors, such as expenditures on health, have not proven to be very effective." *Id.*

14. James P. Smith, *Consequences and Predictors of New Health Events*, *in* ANALYSES IN THE ECONOMICS OF AGING 213, 230–31 (David A. Wise ed., 2005).

(different measures of socioeconomic status), or even having health insurance, do not appear to predict (or prevent) disease onset.[15]

A more intriguing component of the education–health connection involves mixed evidence that higher levels of education may increase the diffusion rate of innovative health technology, but in a manner that could worsen health inequality.[16] Sherry Glied and Lleras-Muney find that more-educated people appear to benefit more from the development of new health care technologies.[17] More-educated people are better informed about medical innovation, have a more positive view of its risks and benefits, and search more effectively among providers varying in quality and practice patterns.[18] Although education increases the overall technological diffusion rate, the lagged pattern of adoption in an era of accelerating technological innovation can generate ever-widening gradients in overall health.[19]

Dana Goldman and Darius Lakdawalla also suggest that technological progress in health care—and increased government subsidies for research to accelerate it—may worsen health inequality over time.[20] They distinguish between technological change that involves more investments of one's own time and those that make time inputs less productive.[21] They observe that more-educated patients will devote relatively more resources to managing their own health, rather than having it managed, and therefore prefer "own time" technological change to "time-saving" technologies.[22] The likely implications of these effects are that economy-wide growth in levels of education may encourage more technological change involving patient-intensive, own-time investments.[23] Although new health care technologies, such as vaccines, that supplant time investments can reduce health disparities, such "[t]imesaving technologies may be more likely to arise when large numbers of uneducated people suffer from a disease" and "less likely when a disease is confined to the educated or the rich."[24] Goldman and Lakdawalla thus expect people with chronic, but treatable, conditions to exhibit greater health disparities.[25] Accordingly, prevention of treatable conditions is more effective than prevention of untreatable disease in reducing health inequality.[26]

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15. *Id.* at 230.
16. *See* Sherry Glied & Adriana Lleras-Muney, *Health Inequality, Education and Medical Innovation* 24 (Nat'l Bureau of Econ. Research, Working Paper No. 9738, 2003).
17. *Id.* at 22.
18. *Id.* at 22–23.
19. *See id.* at 24.
20. Dana Goldman & Darius Lakdawalla, *Understanding Health Disparities Across Education Groups* 5–6 (Nat'l Bureau of Econ. Research, Working Paper No. 8328, 2001).
21. *Id.* at 5.
22. *See id.*
23. *See id.* at 37.
24. *Id.*
25. *Id.*
26. *See id.* at 36–37 ("[T]he advent of a chronic, treatable illness will tend to widen health disparities, while the advent of an untreatable illness will contract them."). These still somewhat-

Recent evidence is more mixed concerning the possible effects of education in improving patient compliance with effective health-treatment regimes and enhancing self-management of care. Goldman and Smith found that better self-management of disease by the more-educated was a critical factor in maintaining the socioeconomic-status health gradient for diabetes and HIV.[27] However, those examples of educational differences combining with newer medical technologies to exacerbate already large differences in health based on socioeconomic status may be limited to certain diseases and treatments. More recent work by Goldman and Smith, involving ACE inhibitors and calcium channel blockers used to treat hypertension, found no evidence that "diffusion of these drugs into medical treatment favored one education group relative to another."[28] On the other hand, Anne Case, Ingrid le Roux, and Alicia Menendez discerned more of a patient-compliance effect than a diffusion effect, and, in the case of hypertension medication, this was tied to household income, rather than to education.[29]

The weight of the limited early evidence suggests that levels of education strongly influence the health outcomes produced by most, if not all, newer health care services (particularly those rewarding greater investments of one's own time) and that those effects appear to stem from a combination of greater technological diffusion and better compliance among better-educated patients.

III

THE PROGRESSIVITY OF MEDICARE

The Medicare program should offer a promising venue for measurement of distributive justice within the U.S. health care system. As an age-based entitlement program, Medicare on its face appears to offer essentially the same health benefits to almost all Americans sixty-five years and older, while its financing through payroll taxes and income taxes suggests at least some redistribution from high-income households to low-income households.[30] However, recent studies examining the relative progressivity of Medicare's structure for financing and benefits delivery, in terms of intragenerational fairness, initially appear to point in several directions.

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speculative projections appear to dovetail with existing concerns about recent trends in pharmaceutical research to concentrate more on developing higher-margin, "lifestyle" drugs aimed at the concerns of more-affluent and presumably better-educated consumers. Admittedly, such business strategies may also be aimed in part at avoiding dealing with those broad-based health conditions most likely to attract greater price regulation and political scrutiny in the future.

27. Dana P. Goldman & James P. Smith, *Can Patient Self-Management Help Explain the SES Health Gradient?*, 99 PROC. NAT'L ACAD. SCI. 10929, 10934 (2002).

28. Dana P. Goldman & James P. Smith, *Socioeconomic Differences in the Adoption of New Medical Technologies* 6 (Nat'l Bureau of Econ. Research, Working Paper No. 11218, 2005).

29. Anne Case, Ingrid le Roux & Alicia Menendez, *Medical Compliance and Income-Health Gradients*, 94 AM. ECON. REV. 331, 334 (2004).

30. Moreover, unlike competing brands of private health insurance with smaller market shares, Medicare provides a rich and comprehensive database to researchers that allows them to examine the flow of taxes paid and health benefits received over time for various cohorts of beneficiaries.

At one end of the spectrum, Mark McClellan and Jonathan Skinner initially have suggested that Medicare's combination of tax payments and program spending actually leads to net transfers from the poor to the wealthy,[31] but the evidence for that conclusion is mixed at best. In their examination of Medicare progressivity in 1997, McClellan and Skinner emphasize the system's relatively regressive payroll-tax financing mechanisms and the longer survival times, and higher spending levels, of wealthier beneficiaries.[32] They find a net flow of benefits from low-income to higher-income individuals in the cohorts that had reached Medicare eligibility to date (as of 1990).[33] However, they acknowledge that if one takes into account the "insurance" value of Medicare, beyond its mere value as a cash-transfer mechanism, there is, on net, "faint redistribution from the highest income deciles to the lowest income deciles."[34]

In a subsequent paper, Julia Lee, McClellan, and Skinner identify "a dramatic change in the pattern of Medicare spending between 1990 and 1995," which they claim "represents an increased redistributional role for Medicare."[35] Specifically, they find Medicare spending per capita in the lowest-income neighborhoods grew much more rapidly (forty-three percent) than Medicare spending for beneficiaries in high-income neighborhoods (sixteen percent).[36] However, this increased redistribution role for Medicare, moving toward rough neutrality in dollar flows, was due in large part to changes in home health care spending that were of more questionable value.[37]

More recently, Jay Bhattacharya and Lakdawalla calculate that the financial returns to Medicare are actually much higher for poorer groups in the population than previously believed, and hence Medicare is a highly progressive

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31. *See* Mark McClellan & Jonathan Skinner, *The Incidence of Medicare* 1, 47 (Nat'l Bureau of Econ. Research, Working Paper No. 6013, 1997). In the latest version of that work, they still conclude that, at least in dollar terms, "the highest income households received net benefits (i.e., lifetime expenditures less lifetime taxes) slightly *higher* than those in lower income groups." Mark McClellan & Jonathan Skinner, *The Incidence of Medicare*, 90 J. Pub. Econ 257, 258 (2006). McClellan and Skinner calculate lifetime expenditures for the elderly in Medicare by residential ZIP code deciles. They use comprehensive Part A and Part B insurance claims data from a cohort of 1.3 million Medicare enrollees for the years 1987–2001. The authors use another survey, the Panel Study of Income Dynamics, to track entire accumulated Medicare payments since 1967 for representative individuals. Their analysis makes inferences about high- and low-income neighborhoods rather than high- or low-income households. McClellan and Skinner also estimate the insurance value of Medicare by using a simple analytic program to measure the money-metric value of the ex ante benefits that the program provides.

32. *See* McClellan & Skinner (1997), *supra* note 31, at 2.

33. *Id.* at 47. After McClellan and Skinner account for the effects of later financing reforms in the early 1990s (removing the cap on wage-based earnings subject to the Medicare share of the payroll tax), which do increase progressivity for more recent cohorts of Medicare beneficiaries, their 1997 analysis nevertheless projects that net transfers will still flow from the lower- to higher-income beneficiaries (except for the very lowest- and highest-income groups) after the first wave of Baby Boomers begins to reach age sixty-five in 2010. *Id.* at 4.

34. *Id. See also* McClellan & Skinner (2006), *supra* note 31, at 258.

35. Julia Lee, Mark McClellan & Jonathan Skinner, *The Distributional Effects of Medicare*, 13 TAX POL'Y & ECON. 85, 86–87 (1999).

36. *Id.*

37. *Id.* at 100–02.

public program.[38] By using educational attainment as a measure of permanent income and socioeconomic status, they find that the poorest groups receive the most benefits at any given age, and the advantage of the poor in benefit receipt is in fact so great that it easily overcomes their higher death rates.[39]

Finally, Skinner and Weiping Zhou observe that the answer regarding Medicare progressivity depends primarily on the question asked.[40] They conclude that when inequality is measured by Medicare expenditures, health care for the elderly became more equitable during the past several decades.[41] However, the rapid relative growth in health spending among low-income elderly people has not translated into relative improvement either in survival or rates of effective care.[42]

IV

HEALTH OUTCOMES, NOT HEALTH INPUTS

The apparent conflicts within the above studies become less significant once relative health outcomes are adopted as the more relevant measure of disparities within the Medicare beneficiary population. Moreover, educational level should be accounted for as a particularly powerful socioeconomic factor behind differences in both the use of health services and the overall health status of Medicare households.

For example, the study by McClellan and Skinner uses ZIP-code-level census information to measure the variation in Medicare beneficiaries' incomes.[43] This produces a rough correlation between Medicare expenditures

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38. Jay Bhattacharya & Darius Lakdawalla, *Does Medicare Benefit the Poor?*, 90 J. PUB. ECON. 277, 278 (2006). In the study, they correct for aggregation bias in previous measures of socioeconomic status based on geography—as done in the McClellan and Skinner study—and instead use individual-level educational attainment. *Id.*

39. *See id.* at 282, tbl.1.

40. *See* Jonathan Skinner & Weiping Zhou, *The Measurement and Evolution of Health Inequality: Evidence from the U.S. Medicare Population*, *in* PUBLIC POLICY AND THE INCOME DISTRIBUTION 288, 306 (Alan J. Auerbach et al. eds., 2006).

41. *Id.* at 296. Skinner and Zhou used a five-percent sample of Medicare enrollees, the Continuous Medicare History Survey, to determine trends in Medicare spending by income decile. They used median ZIP-code income from the 1990 U.S. Census, assigning it to each individual in the Medicare file based on their mailing address ZIP code. They calculate that during 1987–2001, low-income households experienced an increase of seventy-eight percent in per capita Medicare expenditures, double the increase of thirty-four percent in the highest income group. *Id.* at 295–96.

42. *Id.* at 307. To determine the distribution of survival gains by income deciles within the Medicare population, Skinner and Zhou considered two different cohorts from the Continuous Medicare History Survey. They began with the group of people (age 65–69 and age 75–79) alive in 1982, and followed up with the corresponding group alive at those same ages in 1992. Skinner and Zhou find that while all groups gained in terms of survival probabilities, the highest income groups gained the most, both in percentage and in absolute terms. For their other estimates of inequality in the provision of effective care in Medicare, Skinner and Zhou use samples of Medicare claims data for mammography rates and for rates of screening for eye examinations among patients with diabetes. They also derive measures of effective care for heart-attack patients covered by Medicare from the Cooperative Cardiovascular Project survey of acute-myocardial-infarction patients over age sixty-five in 1994/1995. *Id.* at 301–06.

43. McClellan & Skinner (2006), *supra* note 31, at 261.

and lifetime income, reflecting the tendency of higher-income individuals to live longer and to incur more health expenditures at a given point in time.[44] However, McClellan and Skinner offer two caveats to the presumed value of income transfers via Medicare-funded health services. First, health care spending resulting from the program's generous community-rated insurance could be worth much less than its costs to low-income recipients by causing inefficient overconsumption of medical care.[45] Second, and more significantly, they concede an inability to easily measure the value of the health consequences of the additional health care resulting from the Medicare entitlement—although they do reference evidence suggesting the low marginal value of many intensive Medicare services.[46]

The analysis of Medicare's redistribution effects by Lee, McClellan, and Skinner similarly relies on finding a relationship between differences in average spending and neighborhood income, as sorted by ZIP code.[47] They observe that much of the increased redistribution between 1990 and 1995 came through expanded home health care spending that was concentrated in a few states.[48] Among other explanations, the authors note findings by investigators in the General Accounting Office and the Department of Health and Human Services Inspector General's Office that much of this dramatic increase in home health care spending represented "abuse" by incurring services "that were deemed medically unnecessary."[49] Noting this potential moral-hazard problem, the authors implicitly ask whether lower-income Medicare beneficiaries might have been significantly better off with—and preferred—equivalent cash transfers instead of extra home health care visits or funding for other procedures of low marginal value.[50]

Lee, McClellan, and Skinner also find the large shift in Medicare resources toward people in lower-income neighborhoods failed to improve survival rates and may have even slightly increased disparities in mortality rates.[51] In other words, when the measure of disparities is shifted from unequal health spending to differences in health outcomes or general quality of life, evidence of improved progressivity in Medicare is lacking.

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44. *Id.* at 258.

45. *See id.* at 267 ("It is possible that even with this preferential pricing of the policies, community rating led to more insurance than the low-income elderly wanted.").

46. *Id.* at 272.

47. Lee, McClellan & Skinner, *supra* note 35, at 91–92.

48. *See id.* at 100–01. The authors specifically note Texas and Tennessee as two states where "the overall shifts in patterns of Medicare spending per capita . . . are larger than the nationwide effects." *Id.*

49. *Id.* at 101–02 (citing Judith Havemann, *Fraud is Rife in Home Care for the Elderly: Medicare Investigators Find 40% of Services Unjustified*, WASH. POST, July 29, 1997, at A1). Lee, McClellan, and Skinner also observe that the large shift in Medicare resources towards beneficiaries in lower-income neighborhoods did not improve survival rates for the poorest individuals (the first decile) there. *Id.* at 102. They suggest that the expansion of home health care might also be related to for-profit hospital growth in higher spending areas. *Id.*

50. *See id.* at 102, 105.

51. *See id.* at 102.

Bhattacharya and Lakdawalla use a different measure of socioeconomic status to reach strikingly different conclusions about the relative progressivity of Medicare.[52] They explain that the apparent relationship between richer areas and greater aggregate levels of Medicare spending overlooked evidence of geographic mobility by elderly people.[53] More specifically, they note that elderly people moving to richer ZIP codes, with presumably higher quality medical facilities, tended to increase their total medical spending, while those moving to poorer areas reduced spending.[54] Therefore, they replace the geographically aggregated measure of neighborhood income and instead use individual educational attainment as a more reliable proxy for differences in permanent income among Medicare beneficiaries.[55]

Their analysis concludes that, at any given age, Medicare spends far more on the poor (less educated) than on the rich (more educated).[56] Part of the negative gradient in Medicare spending relative to educational attainment is explained by differences in observed health status.[57] Indeed, they find less-educated people cost Medicare more because they are sicker.[58]

However, somewhat obscured within their study's findings are two other observations pointing in the opposite direction. First, adjusting for longevity and accounting for Medicare-benefit growth on a lifetime basis, rather than measuring at a given point in time, favors more educated groups because of their greater longevity.[59] Second, there is a *positive* gradient in *privately financed* medical expenditures (more education leads to greater spending), once one controls for health status.[60]

Bhattacharya and Lakdawalla raise some interesting points tentatively indicating at least somewhat greater progressivity in the financing and receipt of Medicare benefits. Nevertheless, they do not fully resolve whether educational attainment may have stronger effects on Medicare spending levels than a purer proxy measure for income differences alone would cause. Their measure of Medicare progressivity also remains limited to differences in the dollar amounts of benefits received, rather than disparities in the health outcomes they may, at least in part, help produce.

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52. Bhattacharya & Lakdawalla, *supra* note 38, at 279.

53. *Id*. at 288–89.

54. *Id*. at 289.

55. *Id.*

56. *See id.* at 290 ("Our results suggest that Medicare is financially progressive, by a large margin, when permanent income is measured using individual education.").

57. *Id*. at 282.

58. *See id.* (explaining that much of the negative gradient is due to "differences in observed health status. Including self-reported occurrence of diseases and disability . . . erases more than half of the gradient between high school dropouts and college graduates.").

59. *Id*. at 283.

60. *Id*. at 282. Although Bhattacharya and Lakdawalla only allude to this finding in passing, the likely explanation is that private insurance is prone to greater variation in depth and scope of coverage, which in turn is linked in part to an individual's level of income or education.

The better, if not final, word—at least for the moment—is suggested by the work of Skinner and Zhou. It draws the appropriate distinction between inequality in spending and inequality in health outcomes.[61] The dramatic increases they observed in relative Medicare expenditures for low-income neighborhoods during the past several decades did not translate into relative improvement in health outcomes for low-income elderly people, measured either in terms of ten-year survival rates or rates of effective care.[62] Skinner and Zhou point out that relative levels of health expenditures depend on preferences, health status, and prices.[63] On the other hand, health outcomes are strongly influenced by health behavior, diet, and life-course events (such as past illness) that extend beyond the health care system alone.[64] Because the behavioral factors contributing to differences in health outcomes are also associated with income and socioeconomic status, inequalities in health can "reflect the wider inequalities in society."[65]

Drawing the lines of causation for health disparities remains an imprecise process, regardless of whether one uses measures of differences in income, broader socioeconomic status, education, or intelligence to explain health disparities or instead simply relies on cruder differentials in health services received by various types of people.[66] In any case, Skinner and Zhou advise caution in attributing all dollar increases in Medicare spending "to the people who nominally 'receive' the benefit."[67] For example, they question whether the substantial spike in "inappropriate" home health care spending in the late 1990s, concentrated largely in the poorest ZIP codes of the United States, actually benefited low-income patients.[68] They conclude that measuring inequality on the basis of health outcomes avoids the problem of inferring the effectiveness of health care expenditures and might lead policymakers to focus on more reasonable approaches to improve what matters most—the delivery of "effective" care to lower-income patients.[69]

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61. Skinner & Zhou, *supra* note 40, at 291.

62. *Id.* at 298–306.

63. *Id.* at 289.

64. *Id.* at 292–93.

65. *Id.* at 293 (quoting JULIAN LAGRAND, THE STRATEGY OF EQUALITY 45 (1982)).

66. *See e.g.*, Linda S. Gottfredson, *Intelligence: Is It the Epidemiologists' Elusive "Fundamental Cause" of Social Class Inequalities in Health?*, 86 J. PERSONALITY & SOC. PSYCHOL. 174 (2004) (discussing the influence of a "general intelligence factor" on health status); Catherine E. Ross & John Mirowsky, *Does Medical Insurance Contribute to Socioeconomic Differentials in Health?*, 78 MILBANK Q. 291 (2000) (analyzing whether access to insurance helps to explain prior results showing better health outcomes for higher socioeconomic groups); Theodore Pincus et al., *Social Conditions and Self-Management Are More Powerful Determinants of Health Than Access to Care*, 129 ANNALS INTERNAL MED. 406 (1998) (arguing "limited access to medical services is not the primary basis for socioeconomic disparities in health;" instead the primary determinants of these disparities relate to the "sociocultural context" of the patient).

67. Skinner & Zhou, *supra* note 40, at 298.

68. *Id.* at 297–98.

69. *Id.* at 292, 308.

V

RETARGETING POLICY INTERVENTIONS

Given the comparative ease of tracking dollar flows instead of the multiple causes of health outcomes, it is not surprising that observers tend to look for the missing keys to health inequalities under the bright light of health services spending distribution. However, health care consumers are ultimately seeking better health, not just more health care. Hence, a more telling measure of distributive justice for them would focus not on how much is spent on their behalf, or even how much they receive as health care services, but on how much any resulting improvements in their health status are worth. Retargeting policy interventions to reduce disparities in health outcomes, even as measured along household-income lines, could provide new opportunities to raise the health status for lower-income Americans without foreclosing opportunities to seek even greater tiers of health enhancements—for those more willing and able to pay for them.

As one moves from a narrow concentration on equalizing financial flows for the purchase of health services for lower-income consumers to improving the efficiency of those consumers in producing better health, the menu of less conventional, but potentially more cost-effective, policy options expands.

The first option is not just investing more funds in education, but doing so more wisely. Although levels of educational attainment are generally measured in terms of years of formal schooling, one should not fall into the statistical trap of confusing crude quantitative measures with somewhat more predictive qualitative measures. The value of one's education can vary beyond the number of years of schooling and reflect the particular institution at which one is educated as well as the curriculum that one studies. Moreover, there is at best only a limited correlation between the amount of money spent to educate an individual (inputs) and the educational results achieved (outputs). Given the wide variation in the current quality of education delivered in different public schools that primarily rely on conventional public financing and more centralized decisionmaking through governmental channels, increased use of vouchers placed in the hands of parents might enhance educational choice and competition and thereby improve the quality of education received.[70]

Second, policymakers should deregulate the delivery and financing of medical services to provide patients with more options that offer them greater control over their own care. Deregulation of the medical-delivery side should focus on reducing barriers to entry. Excessive professional licensing restrictions, steep regulatory compliance burdens, and prolonged approval processes for innovative products all tend to favor entrenched incumbents at

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70. The same policy lessons, of course, could be applied to the delivery and financing of health services. Simply throwing more dollars in the same direction and manner at longstanding problems of poor performance and disappointing results is unlikely to achieve significant improvement in either health policy or education policy.

the expense of new competitors and their potential customers. One promising opportunity for deregulation of health-insurance products could involve "competitive federalism," in which state insurance regulators would be free to compete across state boundary lines in sponsoring different "brands" of insurance regulation that could be purchased by consumers in other states.[71]

Choice and competition on the demand side of the market for health care should begin with further changes in the tax treatment of health-insurance purchasing to ensure a more level playing field for all purchasers (including individuals). Although one can achieve a more level playing field by "leveling up" (as by adding new tax advantages for out-of-pocket health spending), in general it would be better to "level down" (as by providing fewer tax advantages for health care spending through insurance) in order to reduce distortions in how individuals weigh the value of health care spending against the value of other ways to improve their health or overall well-being.

Third, policymakers should expand counseling support to encourage more farsighted and future-oriented health behavior. The best opportunities for investments to further this objective remain within the educational system at younger ages, but they could be supplemented through greater outreach in assisting older adults as well. Tax policy changes in the financing of health care, such as further liberalization and expansion of health savings accounts, also could increase financial incentives for health consumers to expand their time horizon in assessing more carefully the relative long-term value of the decisions they make regarding when, and how, they invest in their future health.

The fourth option is to offer more navigational assistance for consumers maneuvering through our complex health care system. Recent experience in implementing the new prescription drug benefit for Medicare beneficiaries underscores the often-overlooked importance of personalized assistance for consumers bewildered by the potentially daunting set of decisions they must face within a system in which opaqueness rather than transparency remains the operating rule of the road. Improving health information for consumers needs to go well beyond bundled choices of insurance products to include greater transparency in the cost and quality, and, most of all, the value of health care options (which may involve choice of medical provider, product, or treatment) at the point of service. Public and private spending aimed at improving health could be better directed toward more support for campaigns to disseminate useful health information and for better integration of health care with supportive nonmedical resources.

Finally, greater focus on improving our financial investments in better health care services is not enough. We also must renew and expand efforts

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71. To illustrate the case for a more dynamic version of competitive federalism that goes well beyond simply authorizing the alternative of federally certified nationwide health insurance, see Tom Miller, "*Improving Access to Health Care without Comprehensive Health Insurance Coverage*," *in* 2 COVERING AMERICA: REAL REMEDIES FOR THE UNINSURED 39, 48–51 (E.K. Wicks & J.A. Meyer eds., 2002), *available at* http://www.esresearch.org/Documents/CovAm2pdfs/CovAm2all.pdf.

within our broader culture to influence social norms to alter customs and social pressures that restrain improvement in health behavior.[72]

VI

CONCLUSION

Greater transparency in health care financing and more skepticism regarding the purported rationales for hidden cross-subsidies and regulatory protections are certainly overdue. Indeed, the connection between reduced access to health care services for certain populations and poorer health outcomes for them may be overwhelmed by larger and more pervasive problems in delivery of medically appropriate care throughout the U.S. health care system. Despite the steadily increasing bills we face for our nation's health care services, recent research by the RAND corporation alarmingly suggests that almost half of standard health care procedures are not provided when clinically indicated.[73]

These may be such issues, though, about which former president Dwight Eisenhower advised, "If a problem cannot be solved, enlarge it." Hence, the distributive-injustice discussion must move beyond simple consideration of increased health-services spending to a broader consideration of the mechanisms that promote healthy behavior that thus might obviate the need for medical care later in life. Such consideration could open policy roads not yet taken, but rich with distributive-justice potential. In particular, enhancing educational opportunities for lower-income Americans may help to ensure that not only no child, but also no patient, is left behind.

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72. For an even broader exploration of the psychosocial variables that influence health outcomes and opportunities to improve them, see Richman, *supra* note 5, at 722–61.

73. Elizabeth A. McGlynn, Steven M. Asch, John Adams, Joan Keesey, Jennifer Hicks, Alison DeCristofaro & Eve A. Kerr, *The Quality of Health Care Delivered to Adults in the United States*, 348 N. Eng. J. Med. 2635, 2643 (2003). More recently, a similar team of researchers concluded that "[t]he differences among sociodemographic subgroups in the observed quality of health care are small in comparison with the gap for each subgroup between observed and desirable quality of health care." Steven M. Asch, Eve A. Kerr, Joan Keesey, John L. Adams, Claude M. Setodji, Shaista Malik & Elizabeth A. McGlynn, *Who Is at Greatest Risk for Receiving Poor-Quality Health Care?* 354 N. Eng. J. Med 1147, 1147 (2006). Its analysis cautions that health care "[q]uality-improvement programs that focus solely on reducing disparities among sociodemographic subgroups may miss larger opportunities to improve care." *Id.*