Essays on Socioeconomic Disparities in Health

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Abstract

The production of health is a complex model of interactions between a number of observed and unobserved inputs, as well as baseline health stock, that vary by socioeconomic status. It is for this reason that researchers have had a difficult time explaining the driving factors behind wide health disparities by economics and demographics. My dissertation consists of three essays that contribute to our understanding of forces behind the phenomenon of socioeconomic disparities in health.

The first paper directly studies the impact of socioeconomic status and race on health of older workers, using panel data from the Health and Retirement Study (HRS). Our empirical results suggest that higher levels of income and educational attainments correspond to better self-reported health. But wealth accumulation has little impact on health status, after controlling for initial health and wealth. We conclude that different components of socioeconomic status have different impacts on self-reported health, and the magnitude of disparities depends on measurement of economic well-being. Higher income significantly increases the likelihood of a good health outcome, even after conditioning on labor market attachment and other inputs to health production. This is consistent with previous findings that regard wealth and income as two distinct dimensions of SES, especially for the elderly. After controlling for inputs, race (Hispanic or black) has no separately observable influence on health status for this older cohort. The findings re-enforce the notion that income affords a longer healthier life so that policies aimed at improving national health need to target budget constraints which includes not only income, but price (marginal cost) – which in the health market translates into insurance.

Access to quality care is a key suspect in explaining differences in outcomes. The first essay re-enforces that notion given the importance of income on outcomes. Insurance status is an obvious indicator of access to care. The dental health market provides a natural experiment for studying the role of access in producing efficient outcomes for a number of reasons: the ability to accurately measure access to care, the significant evidence base surrounding the benefits of preventive care, the wider disparities in quantity and quality of dental insurance coverage, as well as relatively high coinsurance rates in general. The second study examines potential efficiency losses from barriers to preventive care utilization in the dental health

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market. Dental care is a significant component of overall health care, and it has received relatively little attention in the health economics and health services literature. The remainder of this dissertation examines responses to price, and barriers to accessing preventive care in the dental health market.

There may be significant efficiency costs to suboptimal levels of preventive utilization. Given the effectiveness and cost-saving nature of preventive dental health care, assessing and quantifying the determinants of the demand for preventive dental care is informative for policy-making. Policies need to reduce barriers that result in low investments in preventive care. Using data from the dental health market we examine utilization patterns by socioeconomic status and access to care. This paper theoretically and empirically examines the role of socioeconomic factors, dental health insurance and dental health preferences on the decision to use preventive dental care services. Estimated effects of dental health insurance are potentially biased by an adverse selection problem where the demand for services and insurance are simultaneous and driven by health need and preferences. We construct an indicator of preferences to directly purge the bias. We take into account heterogeneity in dental health preferences that may drive the propensity to insure, as well as the propensity to use dental health services (adverse selection). Using self-assessments from the National Health and Nutrition Examination Survey (NHANES), we construct indicators of preferences by taking advantage of the subjectivity incorporated in them. Individuals with greater disutility or distaste towards dental health care utilization are less likely to invest in information pertaining to dental health, including dental care. As a result, they will demand less preventive dental care, which may be suboptimal. Using this survey we are able to test the factors of interest on the propensity to use preventive dental are, conditional on heterogeneous preferences. We find that dental insurance has a persistent but slightly smaller effect in driving the behavior of investing in preventive dental care, after controlling for dental care preferences. Frequency of preventive care visits are also influenced by socioeconomic status and dental insurance coverage, even after conditioning on dental preferences. Conditional on having positive visits, people of high socioeconomic status, with dental insurance, and with stronger dental health preferences, all significantly increase the frequency of care.

The job market paper takes as given that preventive care translates into better health outcomes. While the focus of this third chapter is not to test this assumption, we are able to do so and quantify the impact of routine care on health outcomes to re-enforce the importance of the findings from Chapter 2 of the dissertation. The final chapter of the dissertation uses a model of health production to quantify the determinants of dental health as measured by clinical dental examinations and taking into account patient dental care utilization. We use the NHANES data to test the direct and indirect effects of dental care utilization, socioeconomic status variables, lifestyle, and health behaviors on objective measures of dental health, addressing the endogeneity of dental insurance. Dental care utilization includes both treatment care and preventive care. This part of the dissertation directly focuses on health production to identify key factors that would inform policy on reducing disparities.