

A. SPECIFIC AIMS

Health disparities are an intractable, but not inevitable feature of the American stratification system. Sub-population groups that bear the brunt of poverty, marginalized labor, discrimination, wage gaps, and segregation—also bear the brunt of poor health (Williams and Collins 1995). This facet of American life has led to an increased focus on health disparities; in fact, Healthy People 2010 (HP2010) has put forth two lofty goals for the health of our nation. While many gains have been made for HP2010's first goal, to increase quality and years of healthy life—negligible gains have been made to meet the second goal—to eliminate health disparities (DHHS 2000). One of the primary impediments for reaching this goal is most certainly our lack of understanding of which social processes generate health disparities and how these disparities persist amidst declining morbidity and mortality rates. It is clear that genetics does not offer a complete answer to the question of persistent disparities (LaVeist 1994, Cooper 1986, Frank 2007). Consequently, investigations into possible social, economic, and structural explanations are necessary in order to better understand the origin and cause of modern health disparities. One of the most disconcerting finding with regards to health disparities is the persistent racial gap in health, mortality, and morbidity. This proposal represents a systematic and ambitious attempt to both understand and explain how these patterns have both persisted and fluctuated over time. By combining demographic, public health, and sociological theory and methods we propose to critically examine the dynamic patterns of racial health disparities, focusing specifically on the “African-American/White” health gap, by simultaneously estimating the contribution of age, period, and cohort effects on health trends over time.

While several studies have attempted to understand how health disparities change both across time and over the life-course, research has tended to focus either on one or the other; virtually no research considers both simultaneously. More importantly, to the best of our knowledge, no study has simultaneously considered age, period, and cohort effects when examining the temporal changes in health disparities. Therefore, it is our intention to accomplish two general aims towards the study of both describing and understanding racial health disparities. First, we will employ cutting-edge demographic age-period-cohort (APC) models in order to understand the patterns of health disparities over time. Second, we will focus our energies on examining broad social forces and structural factors that ultimately may determine both population health and racial health disparities. In this way, we will sharpen the focus of health disparities research towards the *social determinants* of health disparities. This process will represent a significant and much needed step towards understanding how social inequality is embodied in our society and ultimately results in racial health disparities. This far-reaching, demographic approach has much to offer in terms of our understanding of the causes and correlates of health disparities as well as the reasons for dynamic changes in disparities over time. To accomplish these research goals, we propose the following specific aims:

1. What are the temporal patterns of change in racial health disparities in the United States?
 - 1.1. For which health outcomes have racial health disparities remained the most persistent and which health outcomes exhibit the most dynamic changes in disparities?
 - 1.2. Do racial health disparities change across periods and for which periods and health outcomes are disparities the largest?
 - 1.3. Have racial health disparities changed across birth cohorts and for which cohorts are disparities the most pronounced?
 - 1.4. Which is the most important contributor to racial health disparities: cohorts or periods?
2. Are changes in disparities across birth cohorts due to the changing composition of successive birth cohorts or to changes the effects of the social determinants of health over time?
 - 2.1. Are racial health disparities a function of changing sub-population demographics, or are they indicative of an actual increase/decrease in health risk attributed to measured factors?
 - 2.2. Are racial health disparities a function of changing behavioral risk profiles across racial sub-groups?
3. What are the particular cohort and period characteristics that are associated with temporal changes in health disparities?
 - 3.1. What period characteristics are associated with changes in health disparities over generations?
 - 3.2. What cohort characteristics are associated with changes in health disparities over generations?