FORECASTING THE FUTURE

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CLOSING REMARKS:

A MISSISSIPPI WITHOUT HEALTH DISPARITIES

Positioning for the Future
Health and Wealth
What If We Stay Unequal?

FORECASTING THE FUTURE

What if we were EQUAL?

The future of Mississippi depends in no small part on the elimination of health disparities.

In the first chapter of this volume we state that health disparities in the U.S. are largely based on disadvantages of social class, race, ethnicity, and geography (Barr, 2008). The intersections of these disadvantages produce truly powerful consequences. **In Mississippi, individuals and communities often endure not just one but multiple disadvantages, creating an environment of hyper-disparity**. Groups with lower socioeconomic status, African-American heritage, and rural residence all experience significant disparity, and these groups represent huge and overlapping segments of the Mississippi population, resulting in truly profound impacts on the health status of the state. **In this section, we will imagine a Mississippi without health disparities, a Mississippi whose health is equivalent to that of mainstream America. What could such changes mean for Mississippi?**

POSITIONING FOR THE FUTURE

Before engaging in a forecasting of the future, it is useful to consider some forces informing the origins of health disparities in Mississippi. Although many discussions of health disparities focus on factors such as social class, race/ethnicity, and residence, powerful historical and cultural influences are also at play. The history and culture of the African-American experience in the U.S., and in particular the state of Mississippi, should not be ignored.

Let us begin with an analogy. Malcolm Gladwell, in his best seller *Outliers*, offers an intriguing discussion of the extraordinary success of Jewish immigrants in America. He asks, why are there so many Jewish doctors, lawyers, and professors, given their relatively small population base? His answer: Jewish history, culture, and the timing of Jewish immigration to America. Historically, many Eastern European Jews experienced discrimination, one manifestation being denial of the privilege of land ownership. Because of this discrimination, many turned to such vocations as owning and operating clothing and furrier enterprises in Eastern European cities. These occupations required complex organizational and business skills, including planning, marketing, finance, and management. When European Jews migrated to the U.S. at the turn of the century, many entering and settling in New York City, these skills differentiated the Jewish immigrants from the majority of immigrants who were largely versed in agriculture and manual labor. More importantly, these skills positioned them perfectly for success in garment and textile industries exploding in that time and place in the U.S. Working diligently, in the right place, at the right time, the Eastern European Jews had all the tools to take advantage of a growing economy. The initial successes of these immigrants produced a wave of successful Jewish immigrant enterprises throughout New York, and it should be of little surprise that the thus-advantaged second and third generations of these immigrants found their way into the privileged professions of medicine, law, and education.

The timing, the location, and the skills of Eastern European Jews entering the U.S. was superb. By comparison, **the timing, the location, and the circumstances of Africans migrating to Mississippi could hardly have been more horrendous.** The African slaves who arrived in Mississippi were clearly at the wrong place at the wrong time with the wrong skills (and opportunities) to take advantage of the New World prospects. African slaves were captured, sold into slavery, and forced to come to the plantation South. For the most part, the slave role was to provide manual labor as field hands for the agrarian economy of the South. Their days were spent in physical toil with little opportunity to learn economically advantageous skills. **The debilitating aspects of slavery may have been even more severe for slaves who worked in the "Western states" of the time - Alabama, Mississippi, and Louisiana. Many of the slaves ending up in these states experienced not one but two devastating dislocations and forced migrations** (Berlin, 2010). First, the infamous Middle Passage brought Africans to the New World, primarily to the

Atlantic Coast colonies. Then, many slaves were sold to plantations in the interior states to fuel the growth of the cotton and sugar cane agriculture. The second dislocation and forced migration again tore families apart and destroyed the social capital acquired over years on the farms and plantations of the Eastern colonies. The slaves who came to Mississippi had to start over once more to establish themselves in a new plantation culture. Thus, **these groups had little to no preparation to take advantage of the industrial revolution that produced so much wealth for the U.S. in recent centuries**.

But how do you prepare for an unknown future? What education, what techniques, and what experiences will be needed to take advantage of future opportunities? These are very difficult questions, but part of the answer is actually quite simple.

It may seem strange to begin a section on predicting the future with a discussion of the past. However, **the contrast between the opportunities encountered by different groups entering the U.S. provides a powerful insight into the role that history, culture, and timing can have for the life chances of a population**. The current disparate effects of poverty, discrimination, and isolation on the health of black Mississippians have their origins in the culture and history of slavery in the U.S. Mississippi has the highest proportion of African-Americans in the nation, and our state feels the legacy of the history and culture of slavery strongly. **The lessons embedded in the contrast between the European Jews and the African slaves are not simply that history is "unfair" or that some groups are "luckier" than others, but that preparation for the future, even an unknown future, is incredibly important. But how do you prepare for an unknown future? What education, what techniques, and what experiences will be needed to take advantage of future opportunities?** These are very difficult questions, but part of the answer is actually quite simple. It is hard to imagine a future opportunity for which a healthy individual or a healthy society would not have a competitive advantage. Thus, **reducing health disparities is the most predictable way to prepare a population for opportunities, even those unforeseen. By eliminating health disparities in Mississippi, we can position ourselves to be more competitive as opportunities present themselves**.

By eliminating health disparities in Mississippi, we position the state to be more competitve as opportunities present themselves.

HEALTH & WEALTH

In the preceding chapters of this assessment, we have provided voluminous evidence on the extent of health disparities for Mississippi. Clearly, large and persistent disparities are a defining aspect of the health status of Mississippi. Consequently, if Mississippi could suddenly become equal to the rest of the nation in its health status, if the racial and geographic health disparities were suddenly removed, there would be truly profound improvements in nearly every important aspect of the life of the state.

In the first chapter of this work, we argue that social determinants of health play a dominant role in the stark health disparities in Mississippi. This argument assumes that poverty results in poor health. In truth, **the relationship between poverty and health is reciprocal. Just as the elimination of poverty can lead to improvements in health, improvement in health can lead to increases in prosperity**. We can easily imagine that the elimination of health disparities will lead to a healthier population and ultimately to increases in the productivity of the labor force and most likely to the creativity of society. This line of reasoning, backed by a substantial amount of research, has led many to advocate "health as an economic engine for development." Dr. David Mirvis, at the University of Tennessee Health Science Center, recently edited and contributed to a special volume on health and economic development with a focus on the Mississippi Delta region. Our summary discussion below benefits greatly from the various articles in this publication (Mirvis, et al., 2008; Bloom & Bowser, 2008; Mirvis & Clay, 2008).

The health and wealth paradigm provides one set of answers to the question, "What if we were equal in health status?" If we remove the health disparities that now impact Mississippi, how would this improvement in health generate development and wealth? While prediction can be a risky and difficult enterprise, there is enough known about the consequences of health to make reasoned estimates of how Mississippi would change. To begin, please recall that average health conditions and outcomes for the white population of the U.S. served as our standard of comparison. In observing disparities across a broad range of health indicators, an overall pattern emerged of both white and black Mississippians experiencing significant health disparities in comparison to the rest of the nation. **The economic benefits of reducing health disparities should therefore improve the economic circumstances of both black and white Mississippians, and eliminating health disparities will most likely constitute an economic engine for the entire state**. However, stark racial differences exist when looking at in the magnitude of the health disparities. Black Mississippians most often lag behind national averages in their health conditions and outcomes (and economic status) and have the greatest room for economic growth.

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Impacts on Individuals

To better understand how the elimination of health disparities would increase the wealth of Mississippi, it is useful to distinguish between health impacts on individual and family economic activity and health impacts on overall economic growth. **The quality and length of an individual's life has a huge impact on their ability to generate income and accumulate wealth**. The World Bank (2006) identifies illness or death as the main cause of new or increasing poverty worldwide. Within the U.S., the cost of illness is a major factor in accumulation of personal debt (Himmelstein, et al., 2005). Medical costs are increasingly a decisive factor in personal bankruptcy. **Eliminating disparities in life expectancy and mortality can extend the working years and encourage income growth** (Strauss & Thomas, 1998). **In addition, reducing disparities in health, associated with quality of life, can increase economic value by improving the productivity of each year that the individual works**. A large body of literature associates poor health with worker absenteeism. Chronic health problems can dramatically increase the likelihood of missed work. Workers with chronic health problems were 2 ½ times more likely to miss 6 or more days of work yearly in comparison to those without chronic diseases (Marmot, et al., 1995). Improved health can increase work capacity (vigor, strength, attentiveness, stamina, creativity, and so forth), which in turn can translate into increased economic productivity. To summarize, **the reduction of health disparities in Mississippi at the individual level should lead to dramatic increases in productivity and creativity, reduced absenteeism, and reduced medical costs and should help control the effects of medical services on personal finance**.

Impacts on Families

The elimination of health disparities for children can be even more dramatic in immediate and especially long-term consequences. Since parents commonly miss work to care for their sick children, the elimination of health disparities in children has a direct impact of reducing parental absenteeism and increasing their productivity. More importantly and more profound in its consequences, **poor childhood**

health can influence long run educational achievement, employment, and income. Poor childhood health has been shown to be associated with adult unemployment (Case, et al., 2005), lifetime earnings (Behrman & Rosenzweig, 2004), accumulation of risk factors (Kuh, et al., 2005), school learning (Jamison & Leslie, 1990), cognitive functions (McCarty, et al., 2003), high school graduation (Strully & Conley, 2004), and managerial jobs (Strully & Conley, 2004). **Parental health problems have also been found to have a negative influence on child development, economic development, and future health of their children** (Strully & Conley, 2004) and to decrease emotional and physical support for the child. Clearly, the reduction of health disparities in Mississippi would result in a substantially more nurturing environment for children in the state that would in turn increase the probability for long-term health, good cognitive development, and productivity. **The reduction of health disparities for children and their parents in Mississippi is a long-term investment whose return is compounded year after year, and the consequences of improved health would be long-term and profound**.

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Individual Impacts on State Business

Eliminating health disparities also has important competitive advantages for Mississippi businesses. Eliminating health disparities in Mississippi would allow local business more equal footing with the rest of the nation. Poor health results in extra costs for businesses because of lost productivity on the job, absenteeism, employee turnover, and costs of healthcare insurance. By eliminating health disparities, Mississippi businesses would improve their productivity, decrease their absenteeism, reduce employee turnover, and obtain more cost-effective health insurance.

Macroeconomic Impacts - Savings

The relationship between health and wealth can also be examined from the point of view of population health and macroeconomic performance. Reducing or eliminating disparities in population health for a state may have important impacts that go beyond specific impacts for individuals or businesses. For example, **poor health reduces personal savings, thus depressing the amount of capital available for economic investments. Individuals with health problems tend to spend more money on current needs and less on future investments. Also, life expectancy is associated with savings both in terms of the motivation to save and the number of years that savings can accumulate**. By eliminating health

disparities, this principle would lead to the prediction that there would be more capital available in Mississippi for economic investment. Bloom and his colleagues (2003) report that for each ten year increase in life expectancy there is a corresponding 4.5% increase in national saving rates. Currently, the life expectancy for the U.S. is estimated at 78.1 years and Mississippi's rate at 73.6 years; a difference in life expectancy of 4.5 years. If Bloom's national estimates apply to a state, **we would expect Mississippi to see an increase in saving rates of over 2% if we attained the same life expectancy as the nation**.

Macroeconomic Impacts - External Investments

Poor population health has also been found to diminish external investments. Alsan and others (2005) using international data estimate that each additional year of life expectancy is associated with a 7% increase in foreign investment. Again, if such estimates apply for a state, **the elimination of life expectancy disparities between Mississippi and the nation would result in a 35% increase in investment from outside the state**. Admittedly, this interpretation of international research is highly speculative, but it is not unreasonable to expect similar forces at play at the state level. **The increase in capital already mentioned from personal savings and the increase in capital from out-of-state investments would allow increasing investment in the implementation of new technology, business start-ups, technology transfers, and access to global markets** (Soares, 2007; Becker, et al., 2003).

Macroeconomic Impacts - Government Spending

The elimination of health disparities in Mississippi would also produce shifts in the investment of state and local government in social goods and services. Theoretically, the elimination of health disparities would not only increase economic activity and result in additional revenue from taxation of a larger economy; it would also decrease the demand for government support for health services and free-up government investments for other infrastructure development and services. An important body of research supports the concept that reducing health disparities would contribute to the development of social capital and community cohesion (Kawachi, et al., 1999; David, 2007).

The World Bank identifies illness or death as the main cause of new or increasing poverty worldwide. Within the U.S., the cost of illness is a major factor in accumulation of personal debt. Medical costs are increasingly a decisive factor in personal bankruptcy.

WHAT IF WE STAY UNEQUAL?

In our predictions of the consequences of eliminating health disparities in Mississippi, we have imagined Mississippi's health indicators and health status rapidly moving toward the U.S. national average, with our state reaping substantial microeconomic and macroeconomic benefits. Bloom and Canning (2000) in their groundbreaking work on the "health and wealth of nations" speak of two quite different trajectories. **Since health and wealth are linked in a reciprocal or two-way relationship, they can spiral upward, with each improvement in health resulting in an improvement in wealth that in turn improves health and so on. Of course, the opposite is also quite possible. Declines in health can result in declines in wealth and then to subsequent declines in health, as circumstances spiral downward**. The implications are critical for a state with relatively poor health status such as Mississippi. We have assumed an elimination of health disparities and a corresponding upward spiraling of health and wealth in the state. **Certain health indicators in Mississippi suggest the spiral is moving in the direction of poorer health. The increase in the chronic diseases of obesity and diabetes portend long-term consequences for the individual, the healthcare system, and the state**.

Obesity and diabetes trends in Mississippi suggest a decline in health status, rather than a move toward reduced disparities.

Obesity and diabetes trends among Mississippians, and especially among African-Americans, are alarming. Not only are there substantial racial disparities, the levels of these conditions for the entire population are sharply increasing. Mississippi has the highest rates of obesity in the nation, and within Mississippi, obesity rates are highest among African-Americans. **Obesity is worsening for the entire country and Mississippi is leading the nation in this dubious distinction**. The impacts of these higher rates of obesity have begun to translate into more obesity-related and diabetes deaths for Mississippians.

One cannot examine the racial disparities in this volume without shock at the extremely high rates of obesity reported by African-American women in particular. In 2007, Mississippi's black women (47%) were more than twice as likely to be obese as white women nationally (23%). This is the single largest health disparity of our entire analyses. Furthermore, rates of obesity for black women in Mississippi have rapidly increased. Between 2000 and 2007, there was a 20% increase in obesity rates for Mississippi's black females, while obesity rates for U.S. white women increased about 5%. The implication of this health disparity is somewhat controversial. Some studies contend that the use of obesity measurements developed for white populations may overestimate the obesity levels for minority groups, such as African-

Americans. In fact, a recent study at Baylor University suggests that African-American obesity levels would be more accurately depicted at about a BMI of approximately 32, rather than 30 (Jackson, et al., 2009). Consequently, studies are overestimating African-American obesity. However, even if correction factors were applied for African-American women in Mississippi, the level of the disparity remains substantial. Furthermore, African-American women are experiencing much higher rates of obesity-related morbidity and mortality. Mississippi's African-American females were three times more likely to die from obesity-related mortality, were twice as likely to be diagnosed with diabetes, and were more than twice as likely to die of diabetes. Due to these very severe disparities, the female African American population demands high priority for research and intervention.

The thrust of our report focuses on the elimination of health disparities in Mississippi and speculates on the consequences of this dramatically improved health upon the state. **We have painted a picture of a state with serious health disparities across a broad spectrum of health conditions and outcomes. Every disparity is a potential opportunity for improvement of the condition of the state and its people. We must determine how we move from where we are today with extensive health disparities to one in which we are at least "average" for the nation.** For Mississippi to become average in health status would truly be a miraculous turn of events but one that is worthy of our commitment and aspiration. **From our perspective, only part of the solution resides in the healthcare system. While quality and access to care must see improvement for the poor, for minorities, and for the isolated; while discrimination based on socioeconomic status, race, and residence must be banished from our healthcare system; while minorities and other underrepresented groups must be trained as healthcare professionals; and while health insurance must be available for everyone, these changes are not sufficient to eliminate all health disparities.** Our other institutions have equally important roles to play. Inequalities in the family, in the workplace, in government, in the mass media, and even in religious institutions contribute to overall disparities that influence health status. It is clear that the solution to health disparities is an ambitious and complicated endeavor. A parallel volume to this one that addresses the most promising strategies for eliminating health disparities in Mississippi would be an important and valuable addition to the literature.

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