

Changes in Race/Ethnic Disparities from Adolescence to Young Adulthood

Research has documented race and ethnic disparities in health care, health, and risk behavior by race and ethnicity. Two types of comparisons have been reported. The first is snapshots of race differences at a single time. The second is trends in race differences across time. In the first category, nearly any give statistic will show differences by race in levels of health, health behaviors, health care, risk behavior, etc. In the second type, we can demonstrate that between two time periods, race and ethnic differences increase or decrease. For example, between 1994 and 1997, Medicaid coverage by Latinos dropped from 20 percent to 16 percent, while non-Latino whites remained constant at 6 percent.

In this paper, we follow a cohort of adolescents for six years into young adulthood, and show how aggregate race cohort trends over the period differ. Following the same individuals over time shows developmental trends for each race which are obscured when snapshots of each race are shown at different times. When shown developmentally, race and ethnic trends emerge that show how race disparities change with age. To make our race comparisons we use data from Add Health Wave I in 1995 and Wave III in 2001-02.

We show variances among race groups at each age as an aggregate measure of race discrepancies. We also show how other race/ethnic groups change in their relationship to whites. We show this because we assume whites will show the best outcomes, and wish to observe whether other groups approach or depart from whites as they age by six years, from adolescence to young adulthood. We display patterns by sex because the sexes often differ with respect to changes in health in relatively short periods.

Needed and could not afford medical care.

Patterns of change for males in unaffordable needed medical care. Shows negligible race discrepancies at Time 1 (adolescents), while at young adulthood, minor discrepancies (Time 2) appear. Black and Asian boys are lowest in unmet need, while Latinos and whites are highest. The same pattern appears for girls, with negligible race differences appear at adolescence, young adults show race discrepancies in the same order as boys. Overall race discrepancies do not appreciably increase.

No current health insurance.

Declining variance in health insurance by race as female adolescents move into adulthood. At adolescence, white females are in the most favorable position, but by young adulthood, Asians are more favorable than whites, although both Asians and whites have deteriorated between measures. Hispanics, the least covered in high school, improved coverage slightly by young adults. For boys, Hispanics got relatively worse, as did all groups except Asians. Overall, race discrepancies decline in adulthood.

No dental exam this year.

Race discrepancies are the same magnitude in young adulthood as they were in adolescence, but whites flipped from best to worst by adulthood, as Latinos and blacks moved from worst to best. A similar patterns occurs for males and females.

Last physical exam more than two years ago.

Males. All races showed a significant decline in physical exams from adolescence to adulthood.

The largest decline was among whites, so that in adulthood, blacks show the most favorable pattern, and whites show the least favorable. Overall race discrepancies (variance) was stable from adolescence to adulthood.

Females. Whites and blacks showed the best record for physical exams in adolescence. From adolescence to adulthood, all races showed improvements except whites, which got worse. But blacks showed the most improvement, and were substantially advantaged in adulthood.

Perceived health as poor to fair vs good to excellent.

Males. All races improved perceived health from adolescence to adulthood. Native Americans showed the worst perceived health in adolescence, and improved the most by adulthood, but were still worse than the others. Other than Native Americans, discrepancies by race in perceived health were trivial.

Females. Perceived health differences by race were trivial in adolescence, and all improved slightly by adulthood.

Ever diagnosed with asthma.

Males. Blacks had higher asthma diagnosis rates in adolescence and adulthood. All races increased by adulthood, but discrepancies between races stayed stable.

Females. Asthma rates were highest in adolescence for Native Americans, and increased most by adulthood. Other races all increased equally by adulthood, but blacks and Asians retained their favored position.

Diagnosed with STD.

Males. Blacks and Native Americans had higher STD rates in adolescence, and increased most by adulthood. Whites and Asians had lowest rates in adolescence, and retained their favored position in adulthood, although all races slightly increased their rates of STDs.

Females. All races increased their rates of STDs from adolescence to adulthood. Blacks and Native Americans were highest in adolescence, and increased their rates the most by adulthood. Whites and Asians had the lowest rates in adolescence, and retained their favored position in adulthood. All races increased their prevalence in adulthood, and showed more variance.

Depressed a lot.

Males. Race differences in depression were slight in adolescence and adulthood. All races declined in depression by adulthood. And race variance was stable across time periods.

Females. All races declined substantially from adolescence to adulthood. Asians and whites retained their favored position in both time periods. Rates for females were twice as high as males in both time periods.

Marijuana use.

Males. Marijuana rates for males were lowest for Asians at both ages. Whites had low rates at adolescence, but increased to the highest rates in adulthood.

Females. Marijuana use increased slightly for all races between adolescence and adulthood. Rates were highest for Native Americans at both ages, and increased most, with Asians and blacks having lower rates at both ages.

Cocaine and other drugs.

Males. Other drug use increased moderately for all races between adolescence and adulthood. Rates of use were highest for Native Americans and whites, and lowest for blacks. Discrepancies by race grew with age.

Females. While rates of other drug use by race were in the same order for males and females, use did not increase from adolescence to adulthood for females.

Smoked at least one cigarette per day.

Males. Smoking increased for all races between adolescence and adulthood. Whites smoked most and blacks smoked least at both ages, but race variance increased in adulthood.

Females. Smoking patterns were similar to males.

Thought about suicide during past year.

Males. Thoughts about suicide had slight differences by race, and declined slightly from adolescence to adulthood.

Females. Thoughts about suicide declined slightly from adolescence to adulthood. Native American thoughts of suicide were twice the rate for other races at both ages, but declined by half in adulthood. Other races had rates that differed trivially from one another.

Obesity.

Males. Males increase obesity rates from about 10 percent to 20 percent from adolescence to adulthood, but did not differ in percent obese by race, except for Native Americans, whose obesity rate in adolescence was much higher, and increased by more in adulthood.

Females. Blacks were obese more often and Asians were obese less often than other races in adolescence. All races increased in percent obese by adulthood, but blacks increased most, and Asians increased least.

Five or more bouts of physical exercise per week.

Males. Race differences in exercise were trivial. Males exercise declined by more than half from adolescence to adulthood.

Females. In adolescence, White girls exercised the most and black the least. By adulthood, race differences in exercise had become trivial. Girls reduced their exercise by more than half from adolescence to adulthood. Girls exercised much less than boys at both ages.

Number of days ate fast food.

Males. Eating fast food increased little for Asians and substantially for blacks from adolescence to adulthood. Native Americans were the greatest fast food eaters in adolescence, but

decreased substantially by adulthood, and were one of the lowest, after Asians.

Females. Females increased in eating fast food slightly from adolescence to adulthood, with black girls leading the way.

Number of days ate breakfast past week.

Males. At adolescence Native Americans ate breakfast least and Hispanics and whites ate breakfast most often. In adulthood, all races dropped a day or two of breakfast since adolescence.

Females. From adolescence to adulthood, females dropped an occasional breakfast, equally in all races. Whites were the most faithful breakfast eaters, and blacks were the least.

PPVT score.

Females. PVT percentile scores were the same for each race in adolescence and adulthood. Whites scored highest, Asian and Native American next, Hispanics next, and blacks lowest.

Males. PVT percentile scores were higher for white males than for white females. Native American males scored lower than Native American females. Hispanic males and females scored alike at adolescence, but males scored higher than females in adulthood. Asian males scored higher than Asian females. In adulthood, Asian males and Hispanic males scored higher percentiles than at adolescence, indicating that they improved compared to other groups (whites and blacks). Asian and Hispanic groups (which have non-English backgrounds) increased their English vocabularies more in comparison with other groups from adolescence to adulthood.

Typical hours of sleep.

Males. In adolescence, white males slept most, and Asians slept least. By adulthood, all races slept more than at adolescence except whites, whose hours of sleep went down since adolescence. As adults, whites slept less than other races, and Native Americans slept most.

Females. In adolescence, Blacks and Asians slept least, while other races were trivially different from one another. In adulthood, all races slept more, but blacks and Asians slept most.

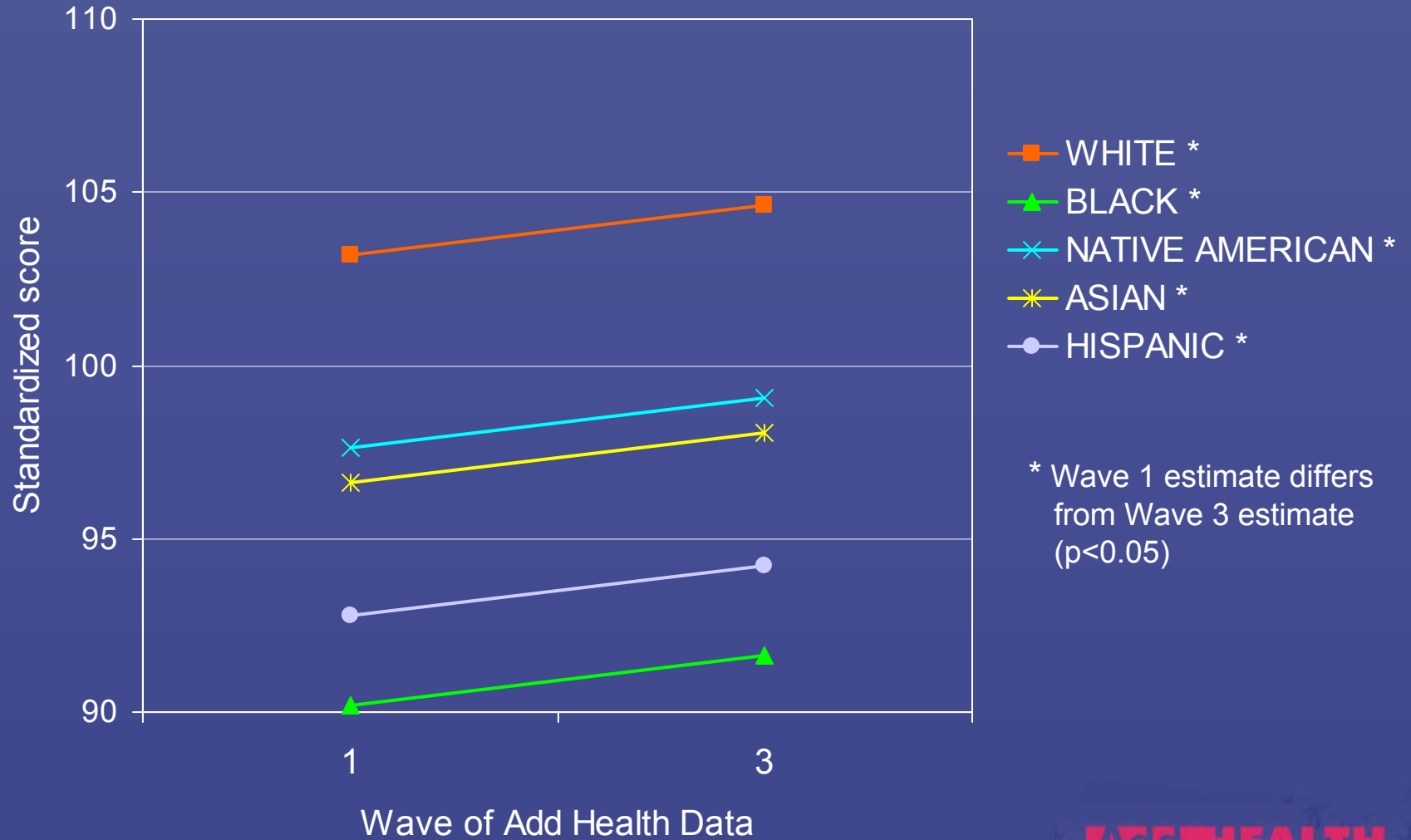
Summary of Trends

- Overall, among-race variance did not increase or decline from adolescence to adulthood.
- Asians were best the most often, and worst the least often.
- Native Americans were worst the most often.
- Whites slipped most from adolescence to adulthood, adding more WORST ratings, and dropping more BEST ratings.
- Hispanics were never the best, and seldom the worst.
- Black females were the worst most often at both adolescence and adulthood.

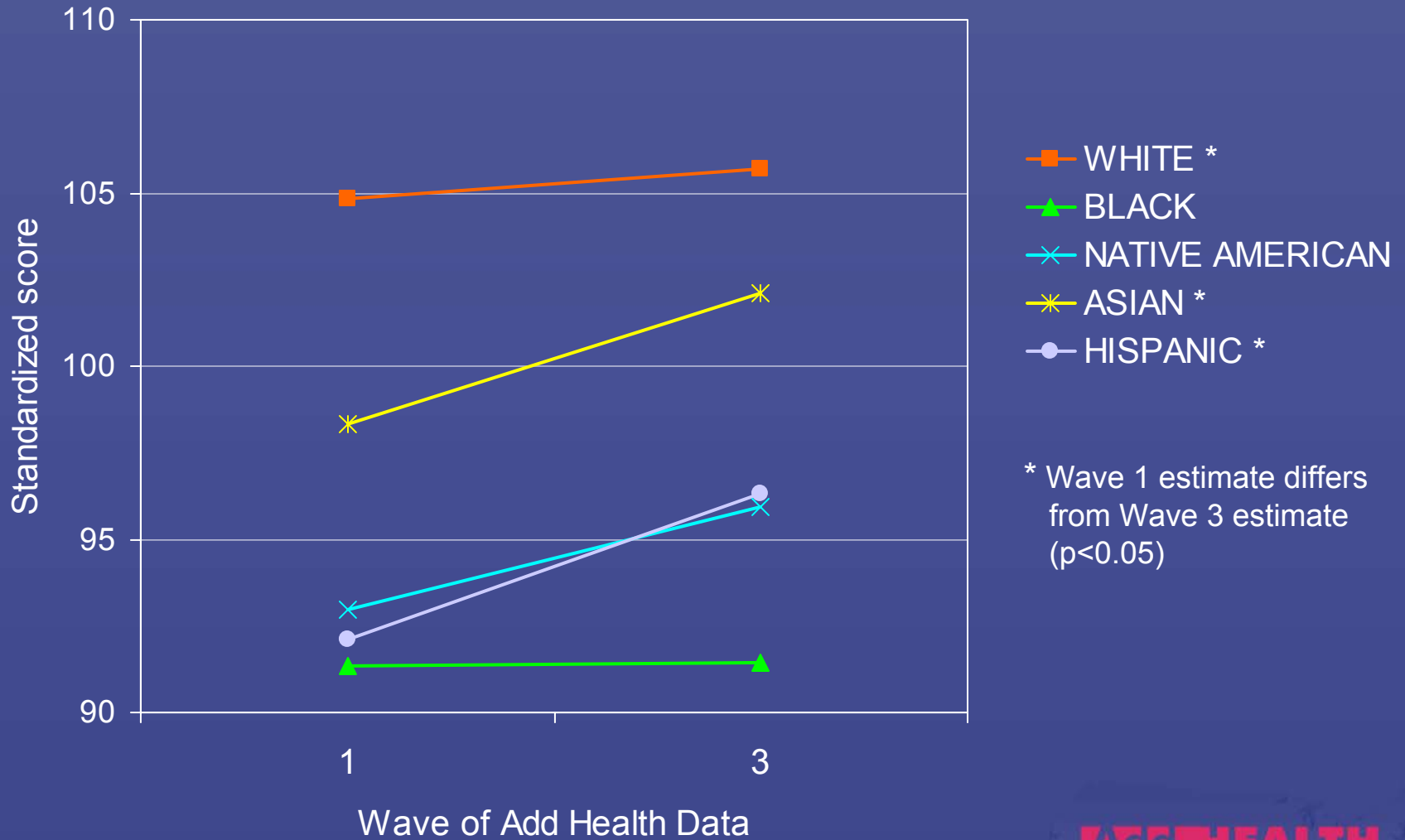
Implications

Examination of race disparities and how they change from adolescence to adulthood reveals that the relative position of the race/ethnic categories is unstable. Depending on the health disparities criterion, one race can be in the most favorable position at one time, and in the least favorable position at another. It is not very useful to summarize across different behaviors to describe ethnic disparities. Even by sex, the races show different disparities. With respect to prevention or remediation of disparities between the races, completely different action is required for each disparity criterion. Race disparities are not usually caused by differences in poverty or socioeconomic status, and cannot be wiped out by equalization of SES.

Standardized PVT score for females



Standardized PVT score for males



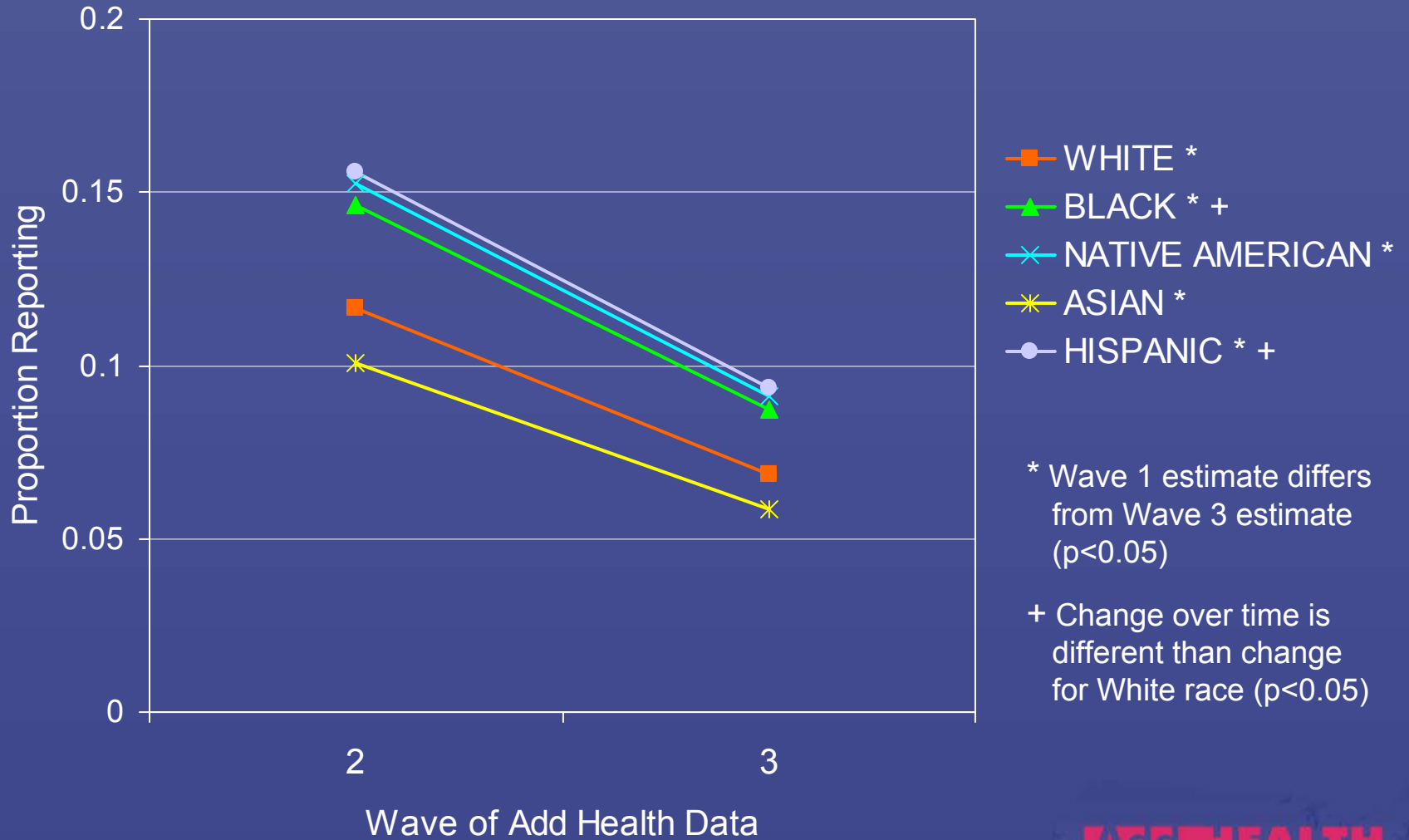
Diagnosed with any STD last year for females



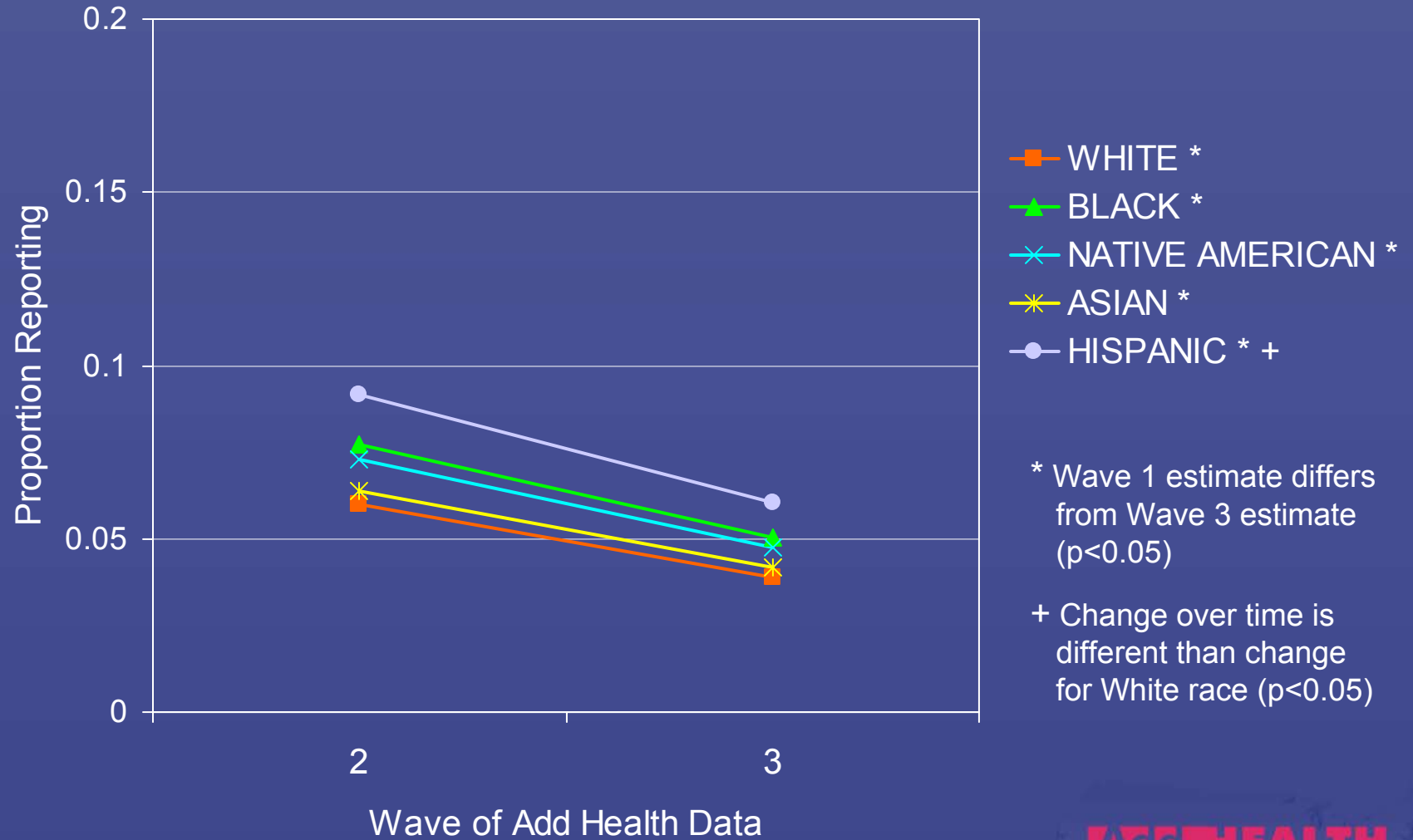
Diagnosed with any STD last year for males



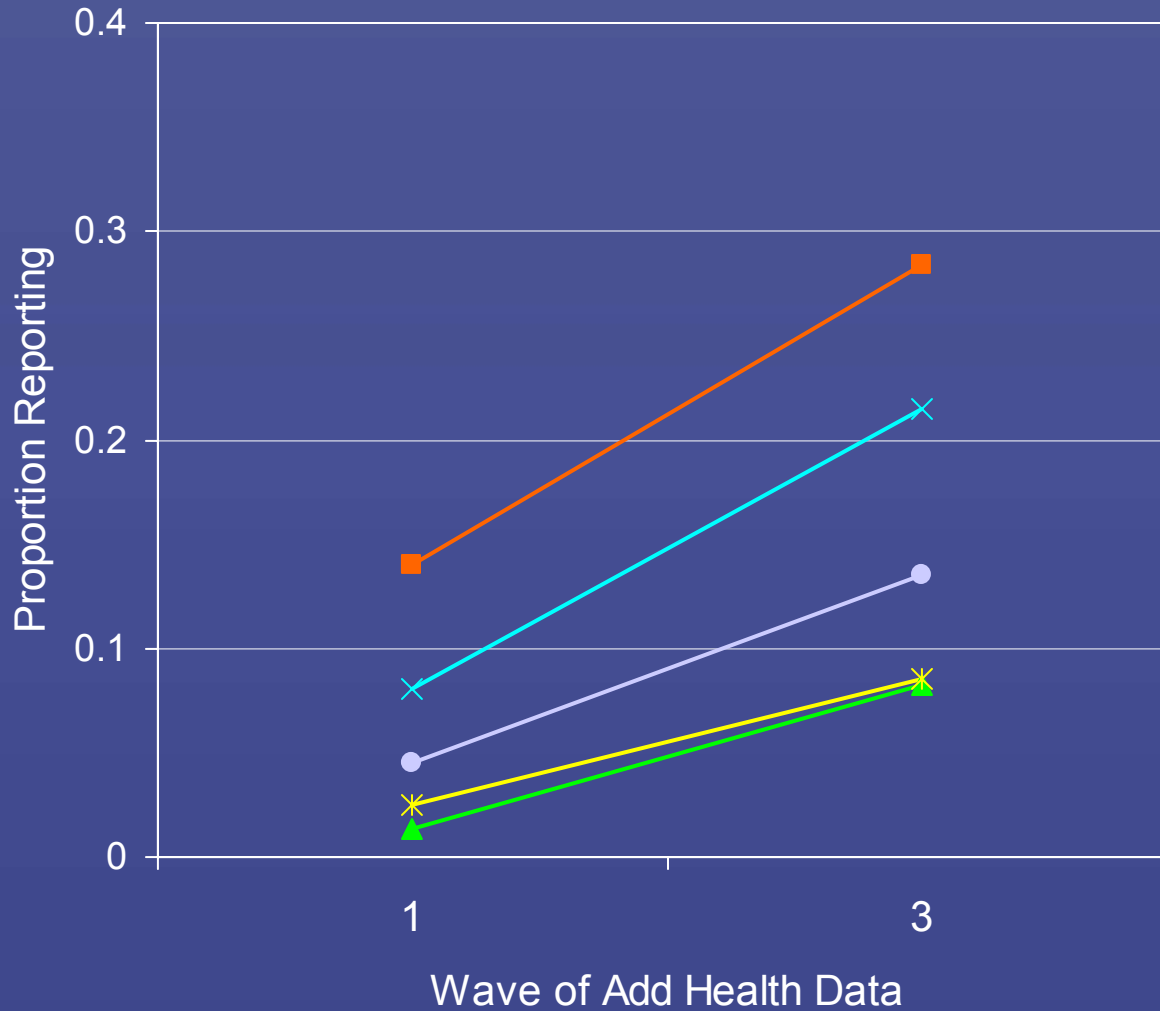
Depressed a lot, most, or all of the time last week for females



Depressed a lot, most, or all of the time last week for males



Smoked at least one whole cigarette daily during the last 30 days for females

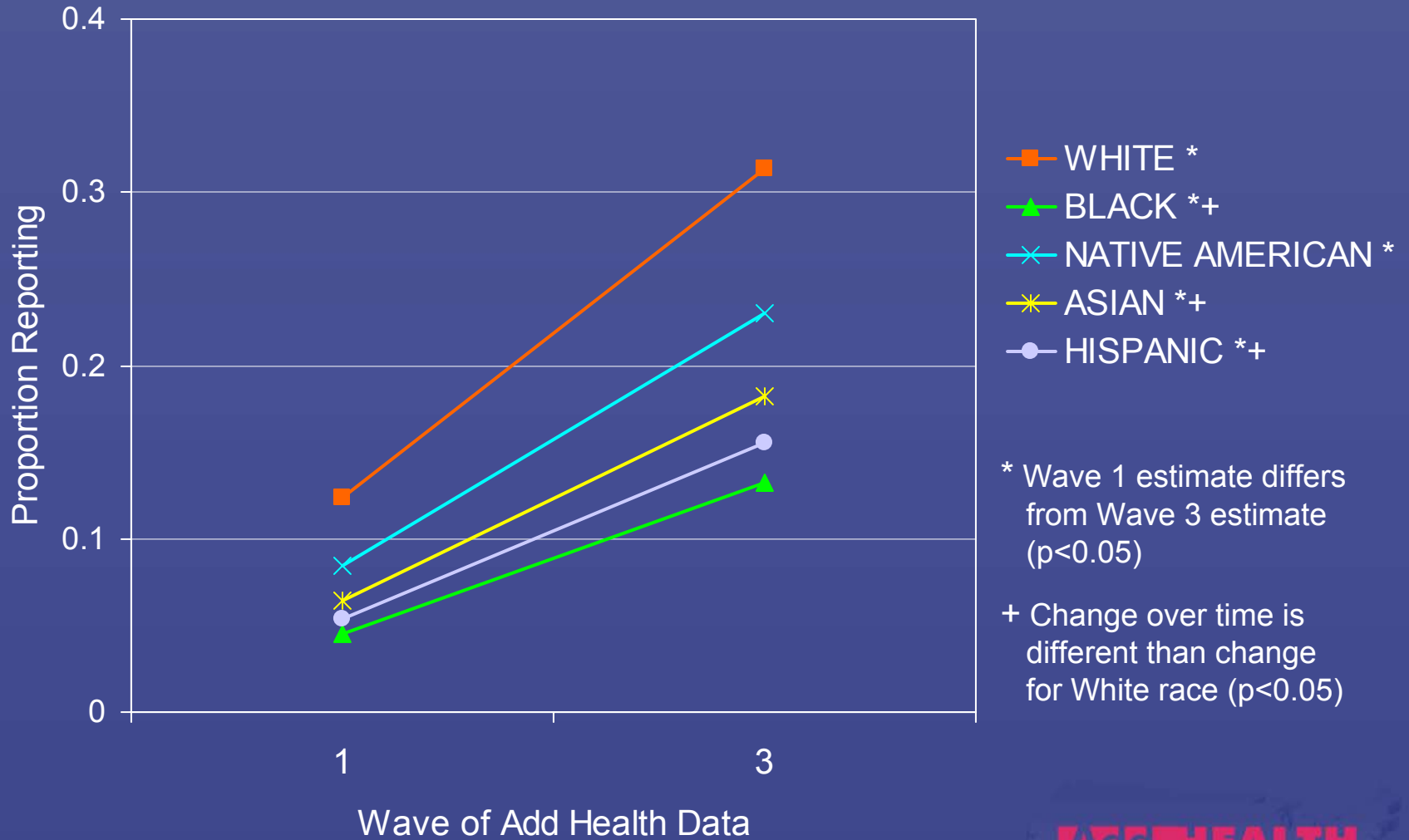


- WHITE *
- BLACK *+
- NATIVE AMERICAN
- ASIAN *+
- HISPANIC *+

* Wave 1 estimate differs from Wave 3 estimate ($p < 0.05$)

+ Change over time is different than change for White race ($p < 0.05$)

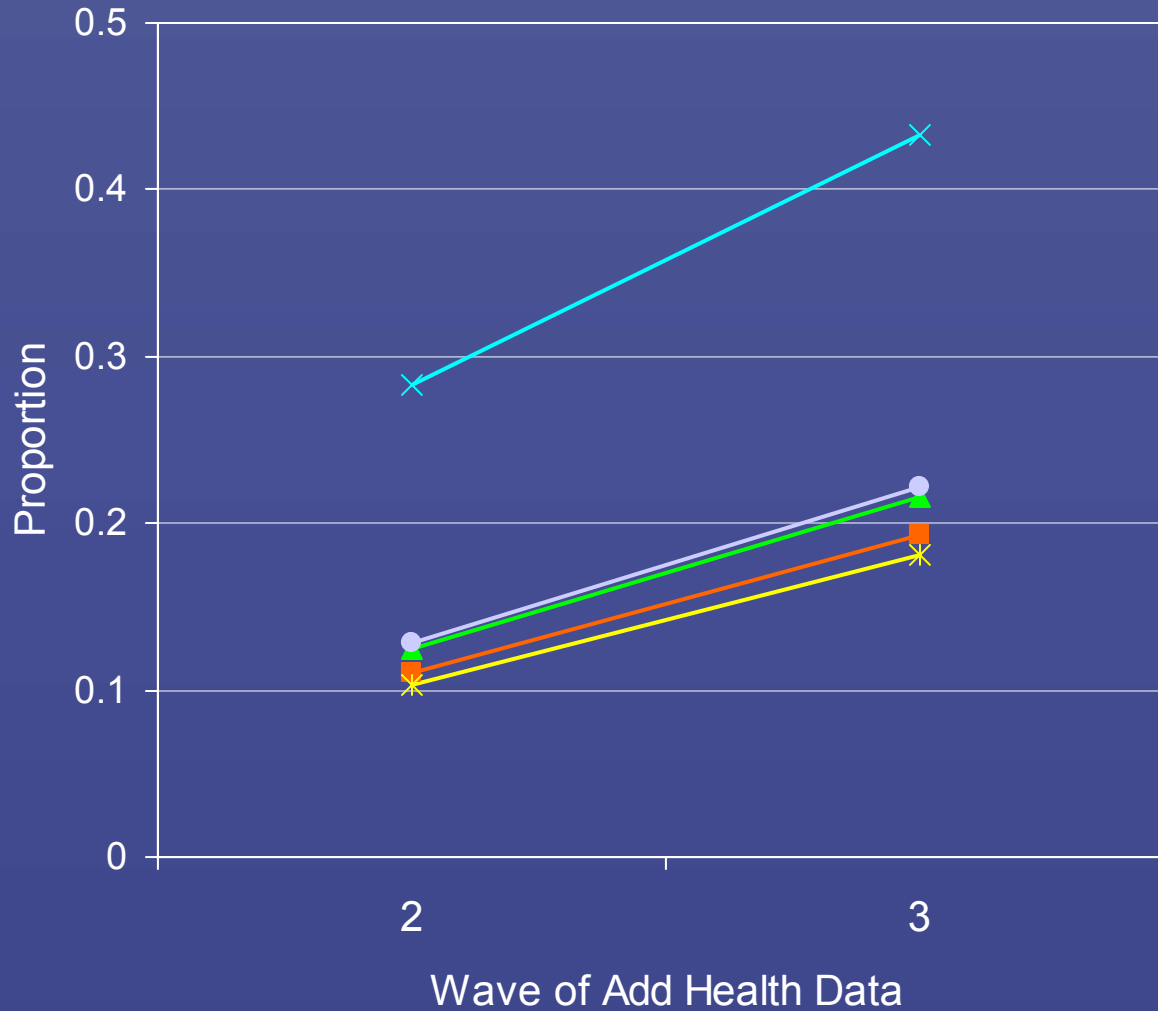
Smoked at least one whole cigarette daily during the last 30 days for males



Obese for females



Obese for males



- WHITE *
- BLACK * +
- NATIVE AMERICAN *
- ASIAN * +
- HISPANIC *

* Wave 1 estimate differs from Wave 3 estimate ($p < 0.05$)

+ Change over time is different than change for White race ($p < 0.05$)