Health Disparities among America's Health Care Providers: Evidence from the Integrated Health Interview Series, 1982-2004

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Introduction- Background

- Social disparities in health are well documented
  - Racial disparities in various health indicators
  - Disparities in health across occupations

- Little is known about health disparities among healthcare workers
  - Assume they would be healthier than general population
  - Unknown if health disparities among healthcare workers mirror that of the general population

Introduction-
Research Question

- Among health care workers:

  - Are there health disparities **across** workforce categories?

  - Are there racial disparities in health **within** workforce categories?

Method-
Data

- ### Sample
  - Adults between the ages of 20 and 64 employed in health care professions in the United States between 1982 and 2004.

- ### Data Source
  - The Integrated Health Interview Series (IHIS), a cross-sectional time series of harmonized data created from the National Health Interview Survey (NHIS) source data.

- ### Variables
  - From IHIS: Demographics (race/ethnicity, age, gender, education, marital status), health status, BMI
  - From NHIS source data: Occupation

Method-
Data Source-IHIS

3433.0: Monday, November 05, 2007: 4:30-6:00 PM
NHIS: Celebrating 50 Years of Success and Planning for the Future

Organizer/Moderator:
Michael Davern, PhD

5:50 PM:
Miriam L. King, PhD, Andrew C. Ward, MPH, PhD, Pamela Jo Johnson, MPH, PhD
Integrated Health Interview Series: Facilitating the use and analysis of NHIS data from 1969-2005

IHIS website: www.ihis.us

Method-
Measures

- **Outcome variables:**
  - Excellent health (self-reported excellent health)
  - Obesity (BMI is greater than 30)

- **Health care workforce categories:**
  - Health diagnosing professions
    - (e.g. physicians, dentists)
  - Health treating occupations
    - (e.g. registered nurses, therapists)
  - Health technicians
    - (e.g. lab technicians)
  - Health service workers
    - (e.g. health aides or orderlies)

Method- Analytic methods

- Logistic regression, accounting for the complex survey design
  - Adjusted for age, gender, marital status, and education
  - Added year dummy variables
  - Stratified by healthcare workforce categories

- Stata version 9.2

Result -
Characteristics of Healthcare Workforce

- Among all US healthcare workers
  - Women (79%)
  - White (75%)
  - Married (65%)
  - College educated (72%)
  - Health assessing and treating occupations (38%)
 - Health services workers (29%)

Result -
Characteristics of Healthcare Workforce (cont.)

- **Across all US healthcare workers**
  - Health diagnosing professions
    - Older, male, married and college educated

  - Evident racial differences
    - Blacks make up 15% of health care workforce
      - Health diagnosing professions (4 %)
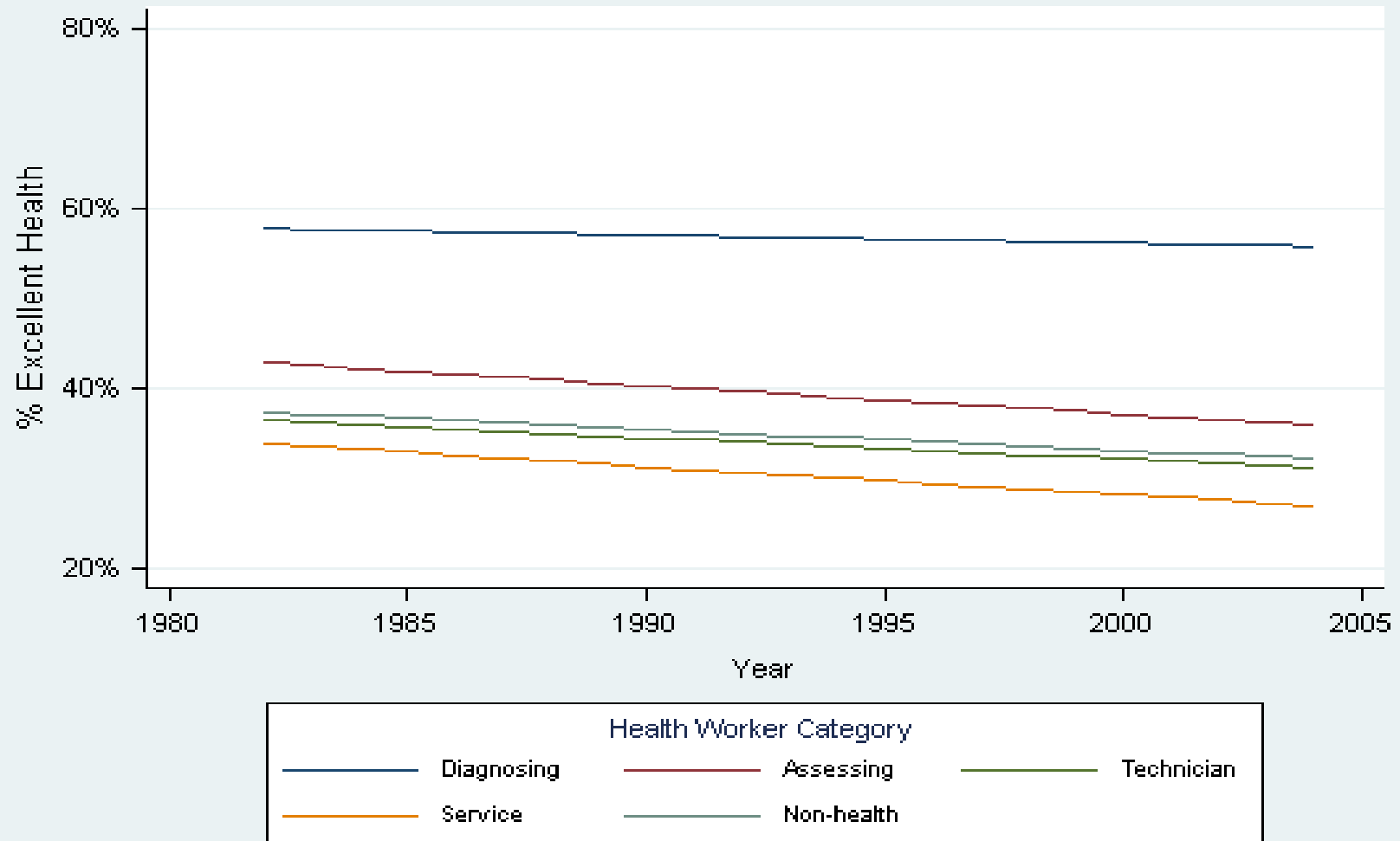   - Health service work (28 %)

Result-Excellent Health
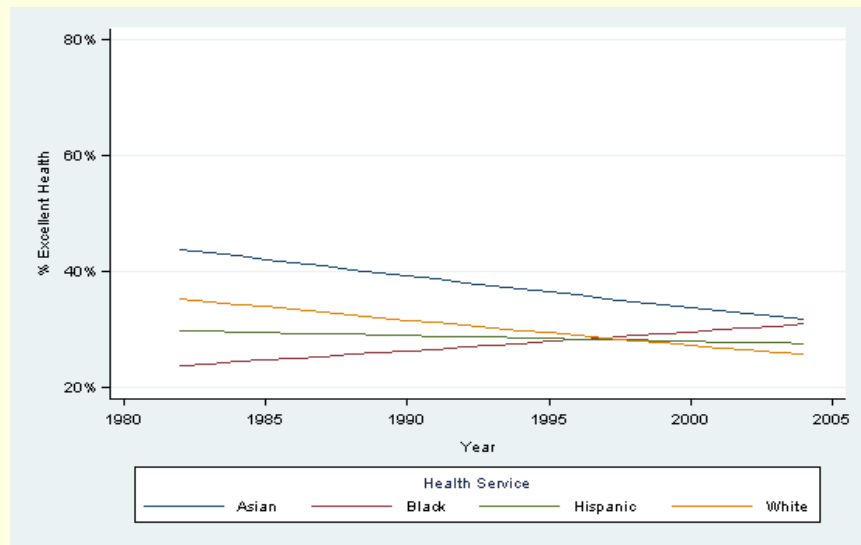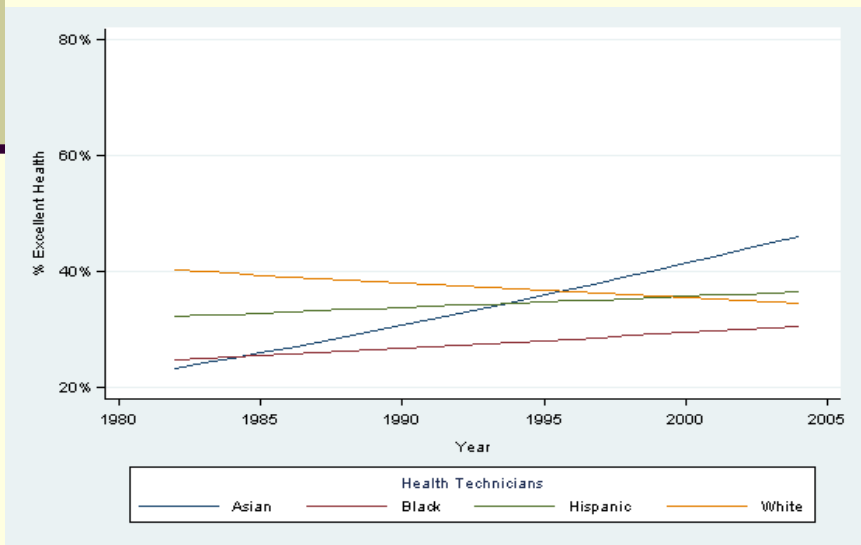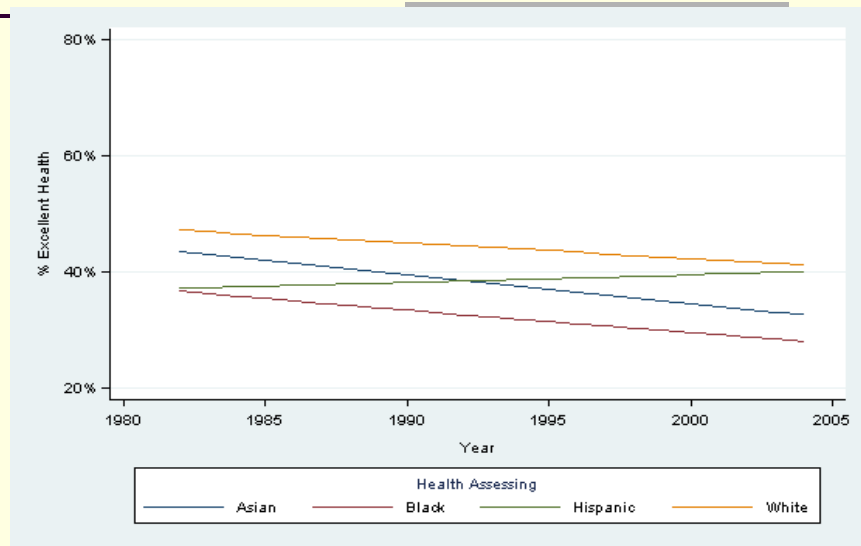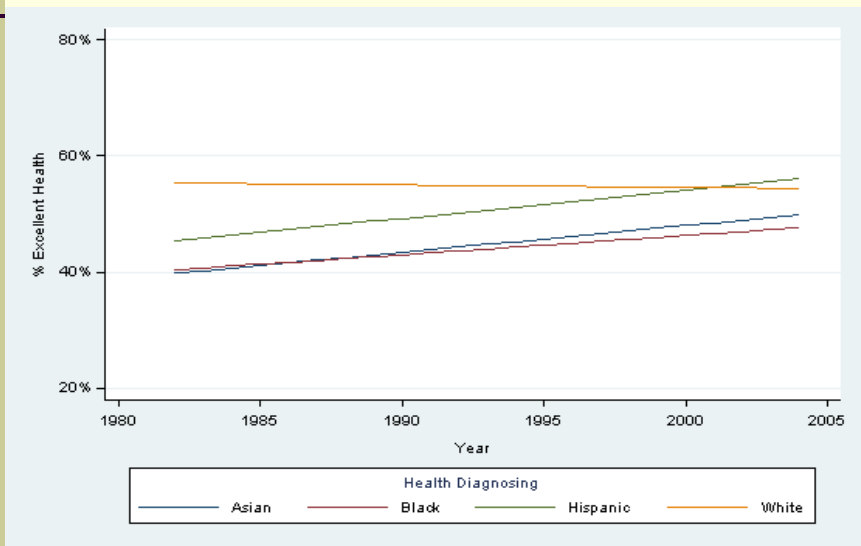## Unadjusted Health Status Over Time
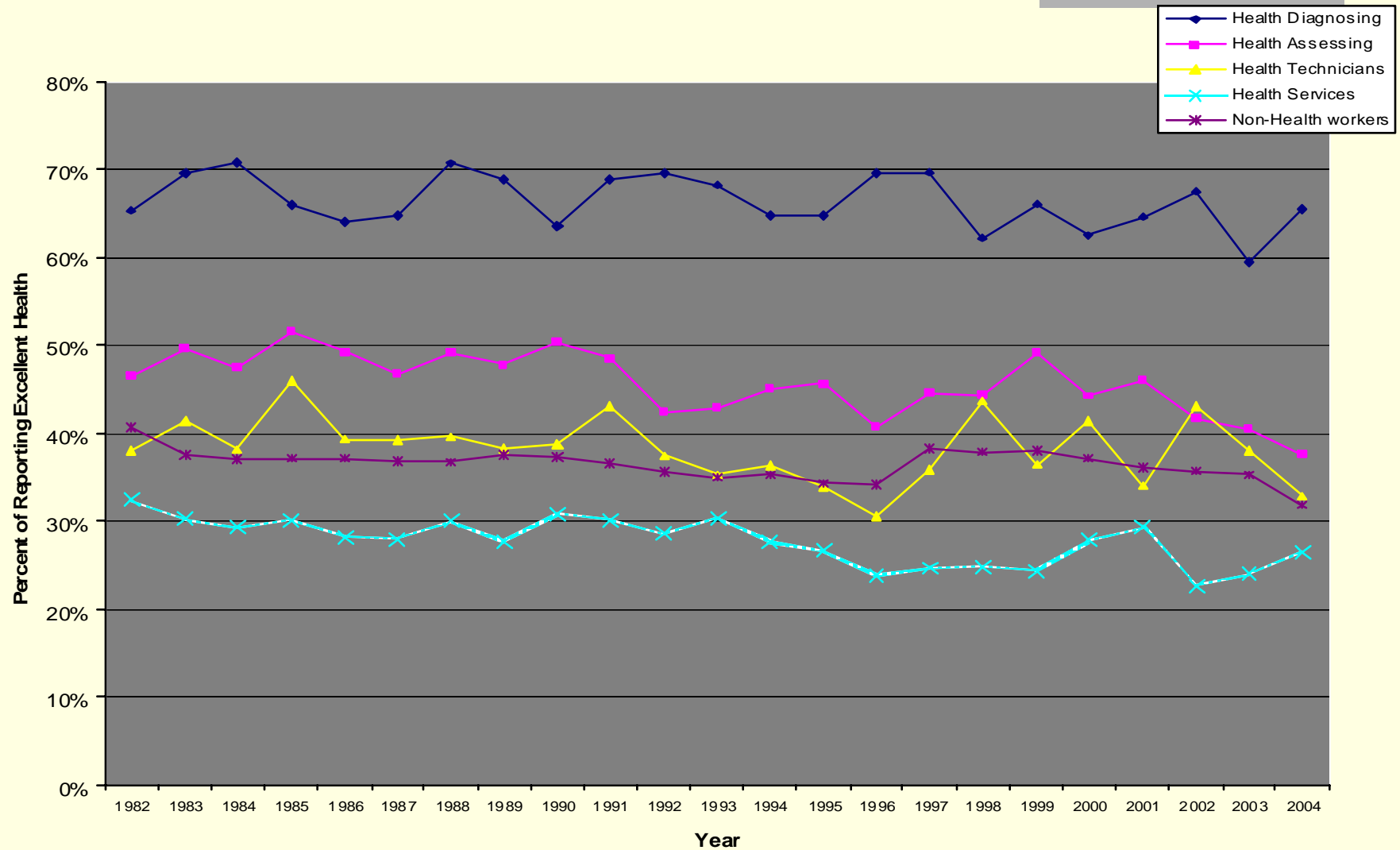
Result-Excellent Health
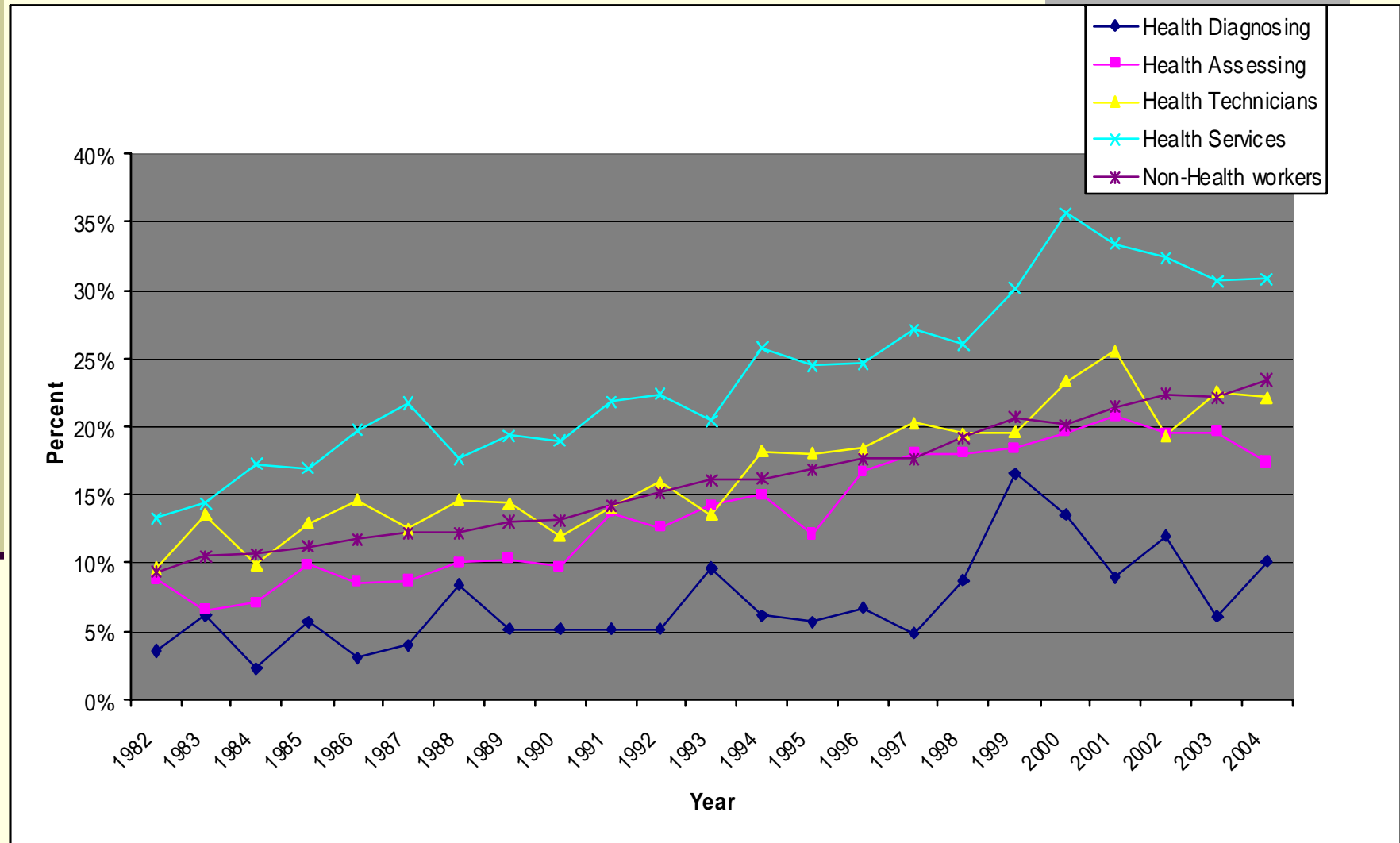## Disparities <u>Across</u> Healthcare Workforce Categories

Result-Excellent Health

Disparities by Race Within the Healthcare Workforce Category
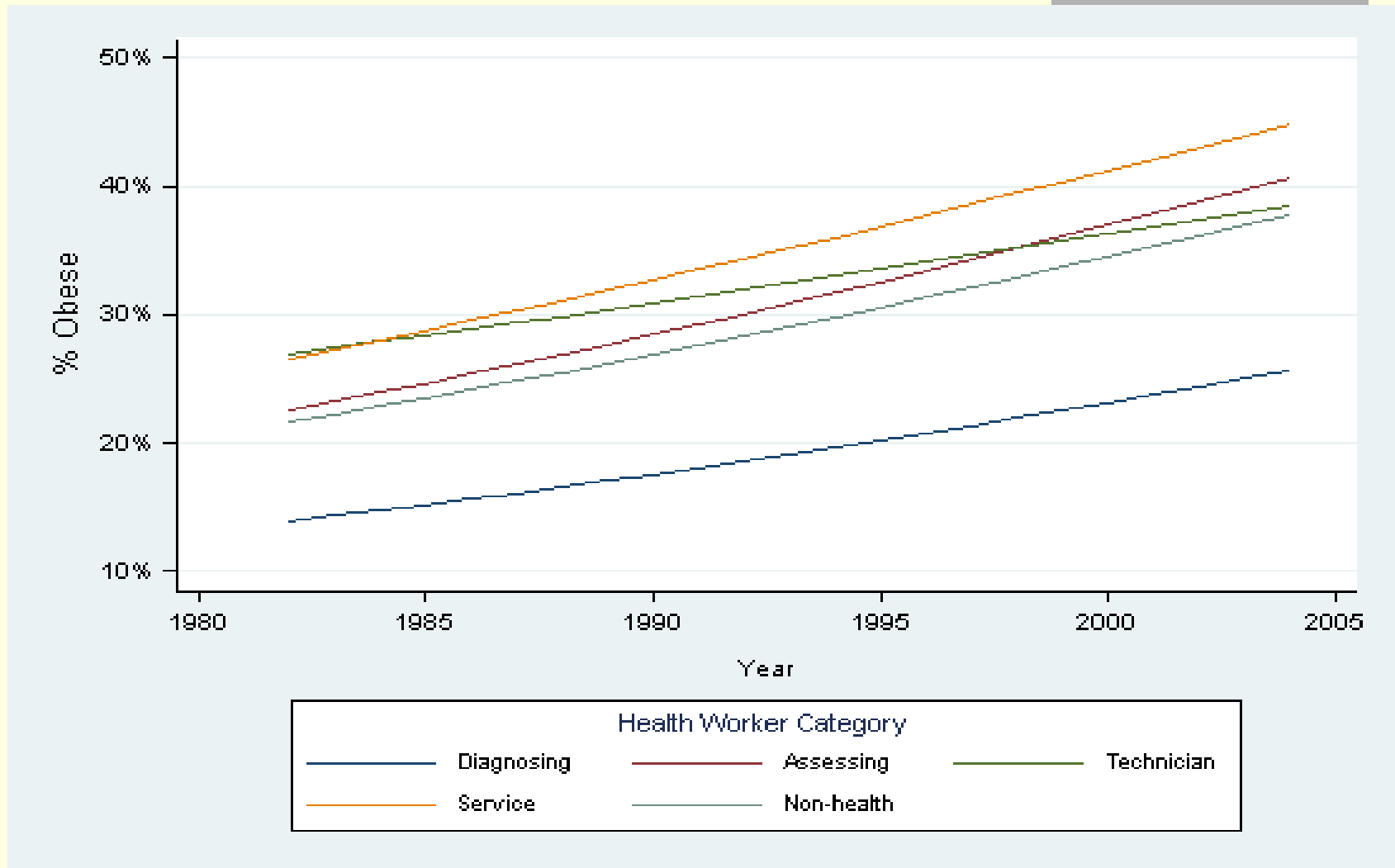
Result-Obesity
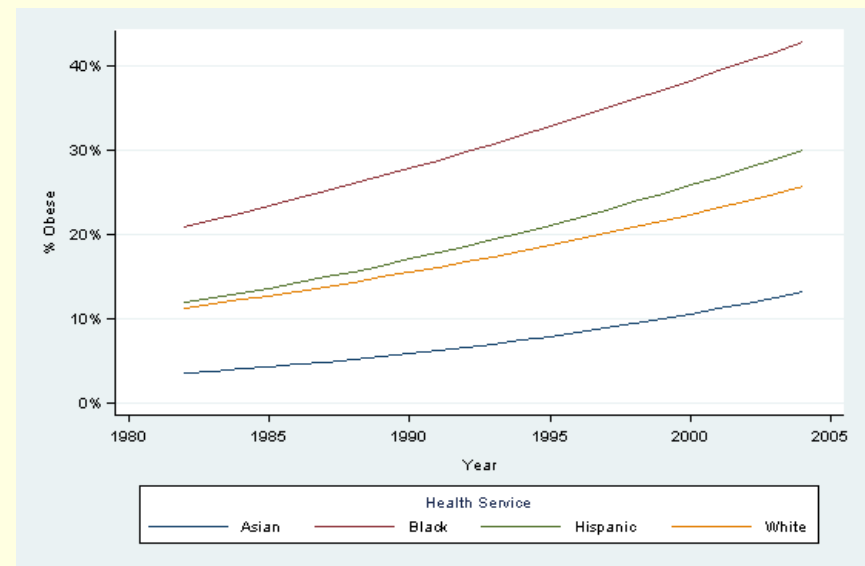## Unadjusted prevalence of obesity over time

Result-Obesity

Disparities <u>Across</u> Healthcare Workforce Categories

Result-Obesity

Disparities by Race Within Healthcare Workforce Category
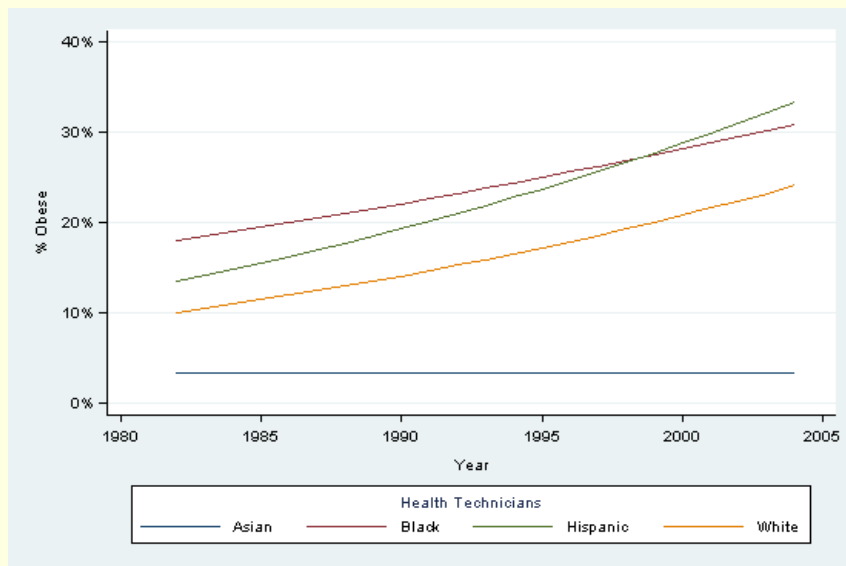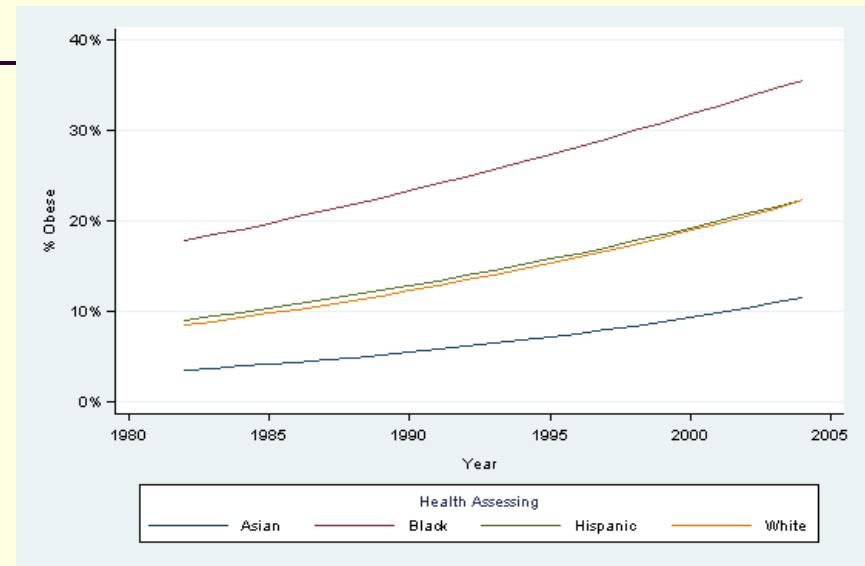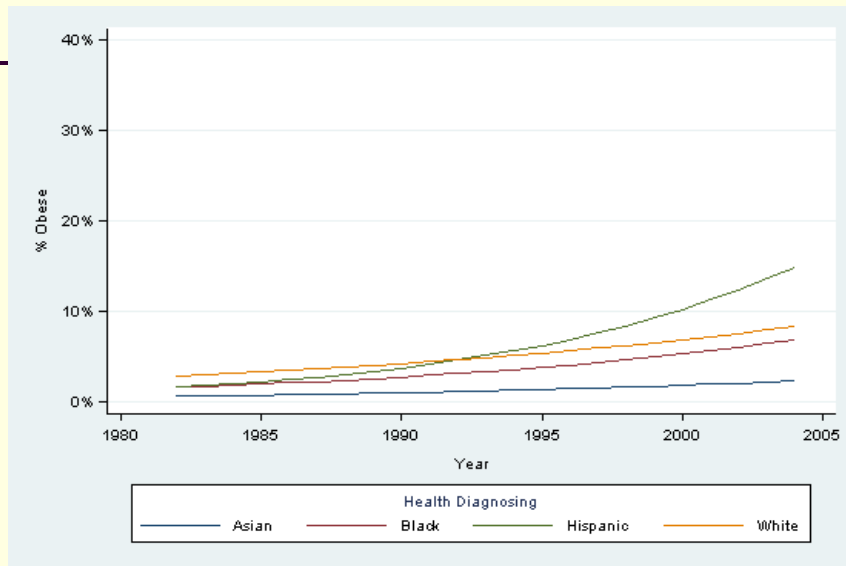
Conclusion

- The health of healthcare workers has declined from 1982 to 2004.

- Health disparities do exist <u>across</u> healthcare workerforce categories.

  - Health status:
    - Health diagnosing professions reported better health than other healthcare workers.

  - Obesity:
    - Health technician and health service occupations are significantly more likely to be obese.

Conclusion (cont.)

- Health disparities by race/ethnicity do exist <u>within</u> healthcare workforce categories.
  - Health status:
    - Black, Hispanic, and Asian health care workers are less likely to report excellent health than White.
  - Obesity:
    - Black and Hispanic healthcare workers are more likely to be obese than their White counterparts in the categories of health technician and health services.
    - Asian healthcare workers are less likely to be obese than White workers across the healthcare categories.

Limitations

- Self-report measurement:
  - Excellent health status.
  - Height and weight (for calculating BMI).

- Broadly defined workforce categories.

- Small sample sizes for some race groups.

- Compositional differences in the population over time.

Summary

- Health disparities do exist among healthcare workers, both <u>across</u> and <u>within</u> workforce categories.

- Providing quality healthcare requires a healthy healthcare workerforce.

- It is important to identify health differentials within the healthcare workforce in order to develop appropriate public health and/or occupational health interventions.

- A diverse, well-trained, and healthy healthcare workforce is key to improving the health status of the population.

Thank You