

# Trends in Racial Disparities in Kidney Disease

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NIDDK**

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**Chronic Kidney Disease**

**End Stage Renal Disease**

**Access to Transplantation**

**Outcomes**

**Mortality**

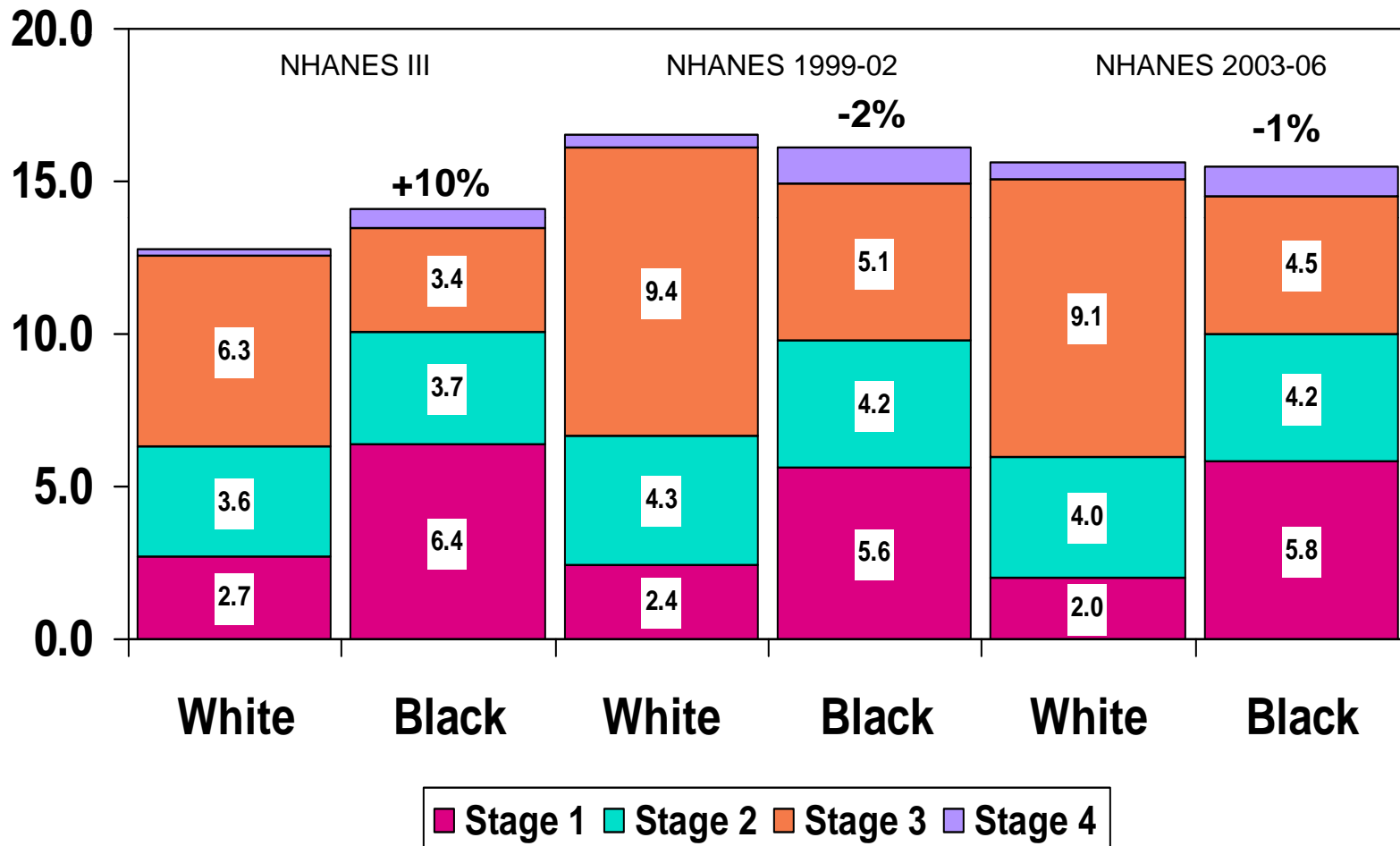
**Transplant Graft Survival**

**Intermediate outcomes – fistula**

**Conclusions**

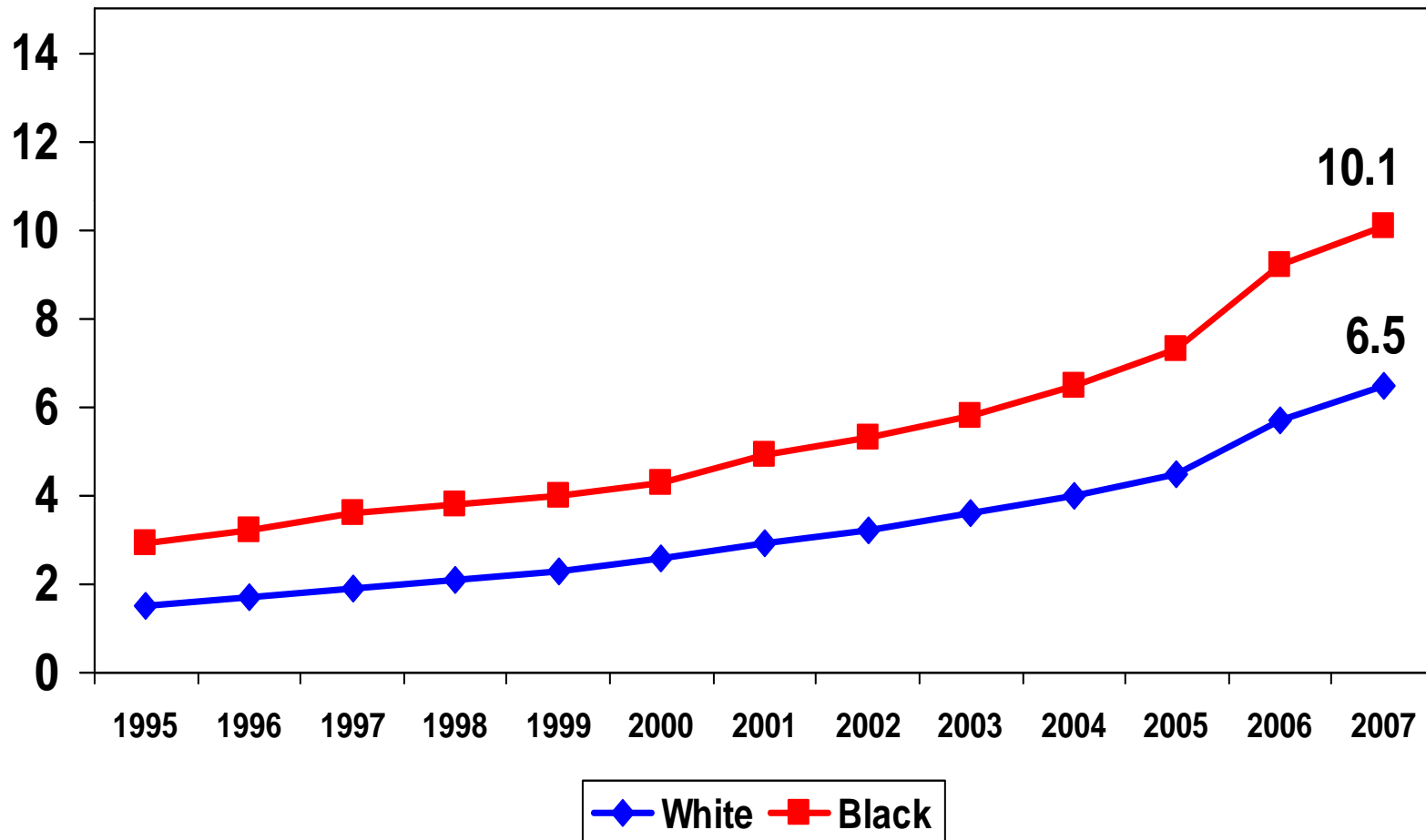
# Chronic Kidney Disease

## Prevalence of Chronic Kidney Disease: by Race NHANES Estimates



Source: 2009 ADR

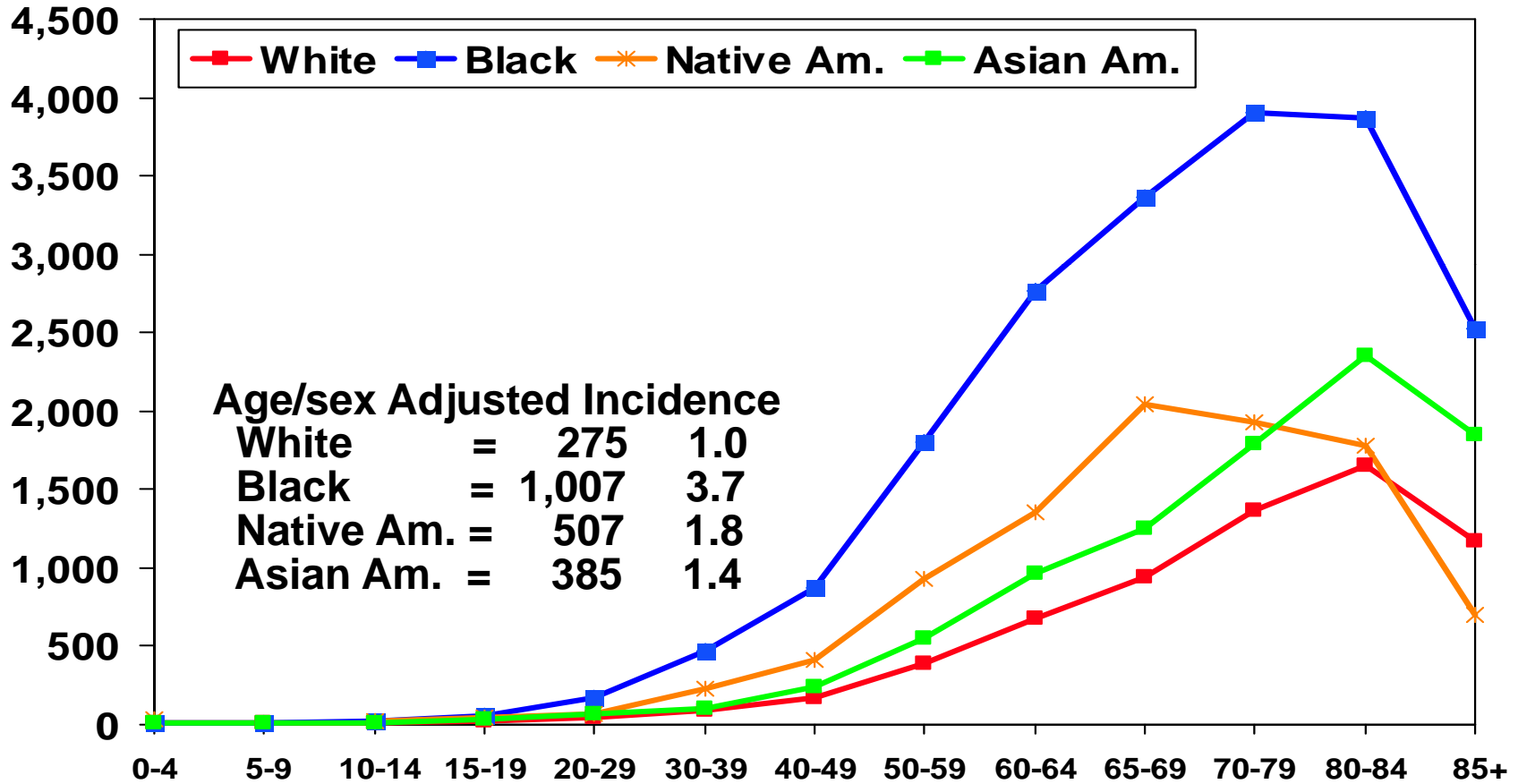
## Percent of persons identified as CKD: by Race Persons ages 65 + Medicare Claims data



Source: 2009 ADR

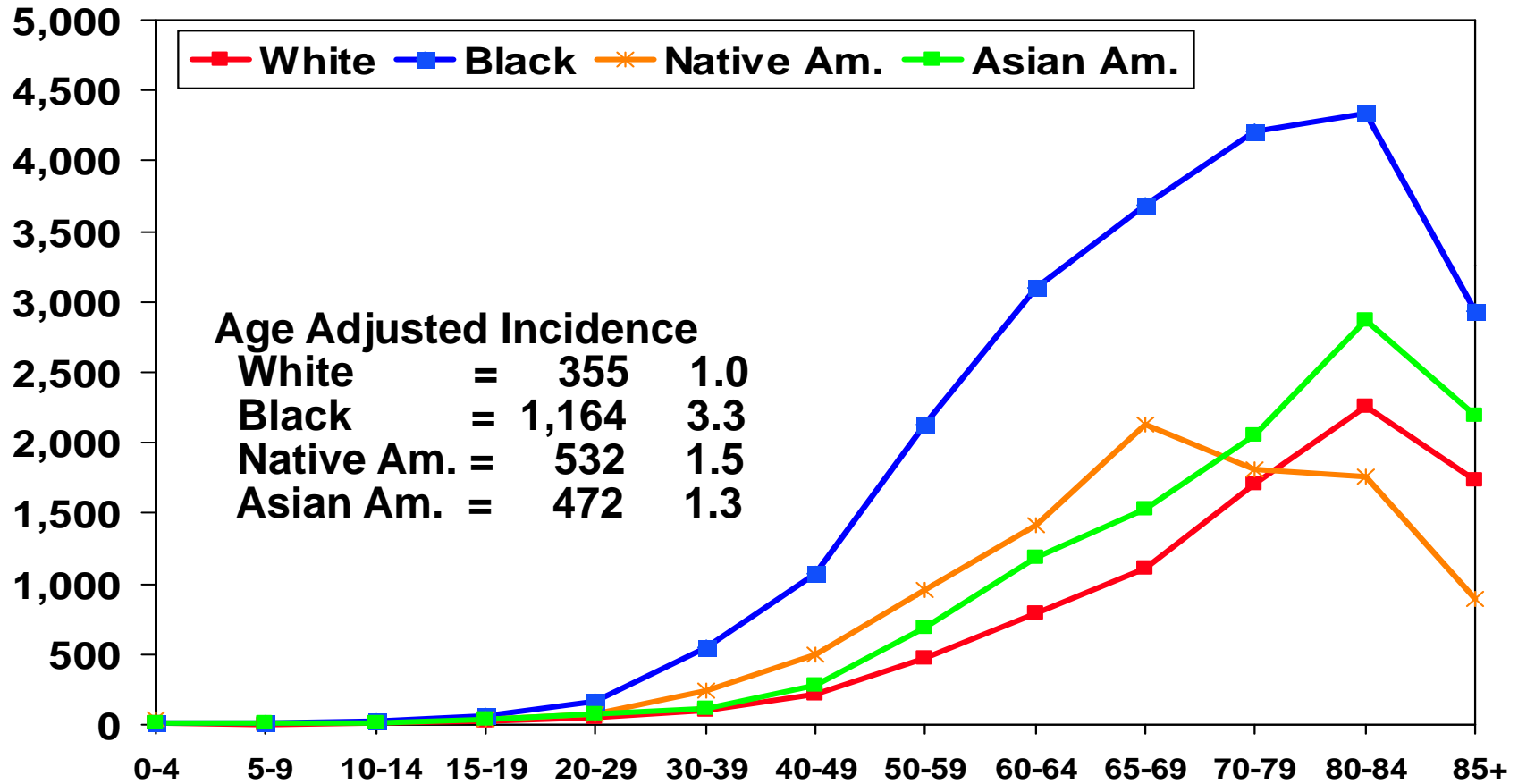
# End Stage Renal Disease

# ESRD Incidence per Million by Race, by Age: 2005-2007 cohorts (adjusted for sex)



Source: 2009 ADR

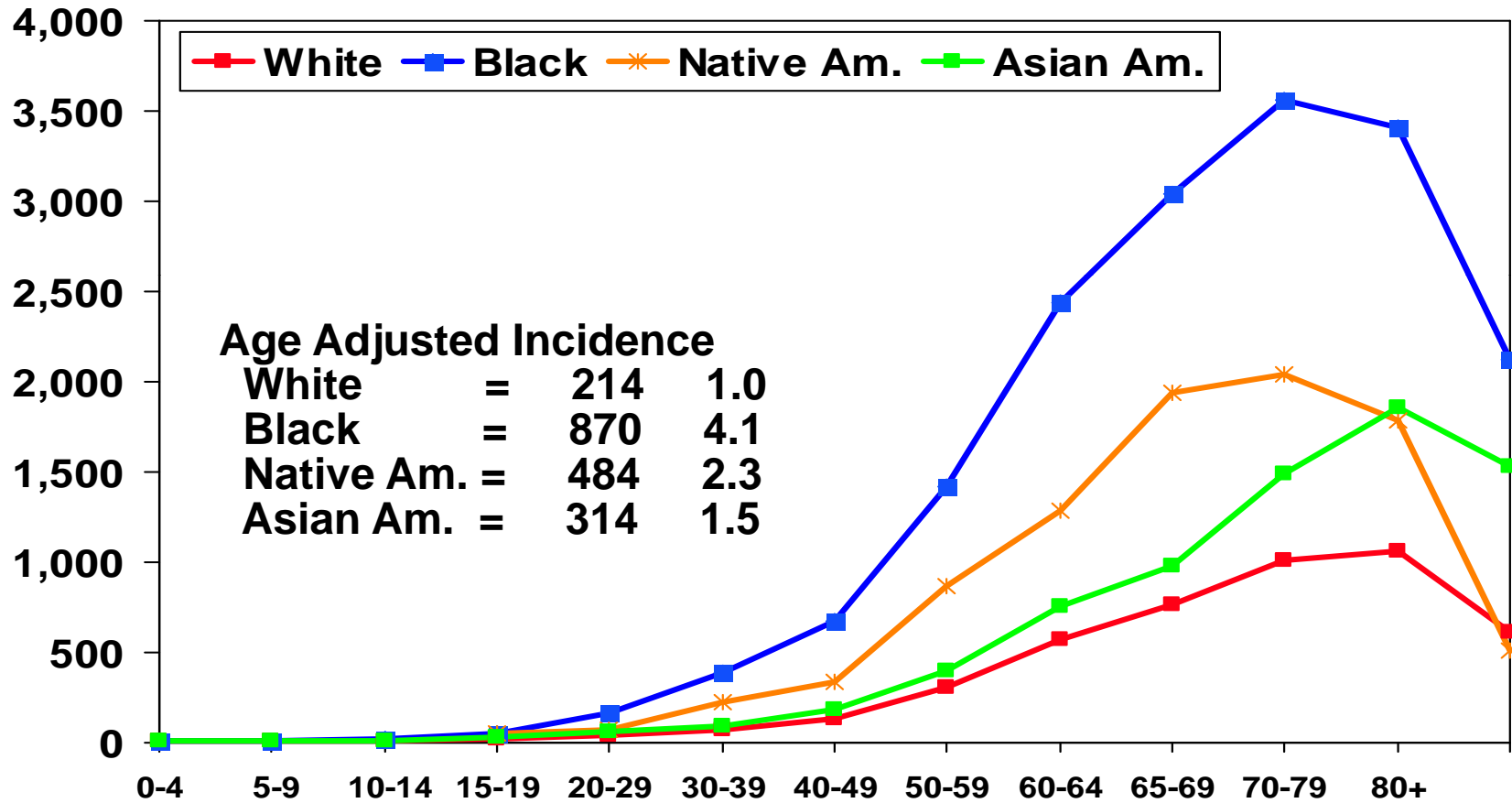
# ESRD Incidence per Million by Race, by Age: 2005-2007 cohorts (Males)



Source: 2009 ADR

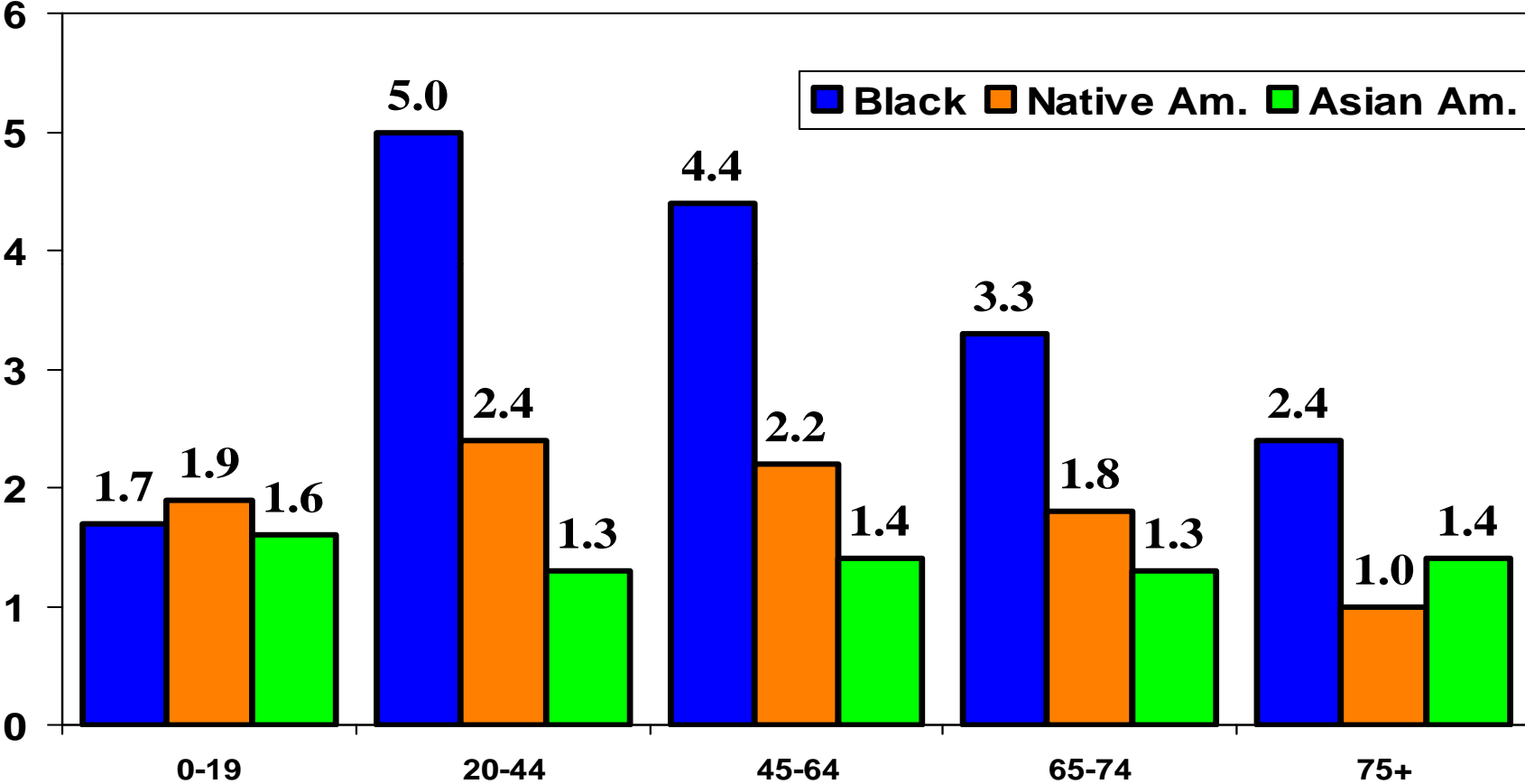


# ESRD Incidence per Million by Race, by Age: 2005-2007 cohorts (Females)



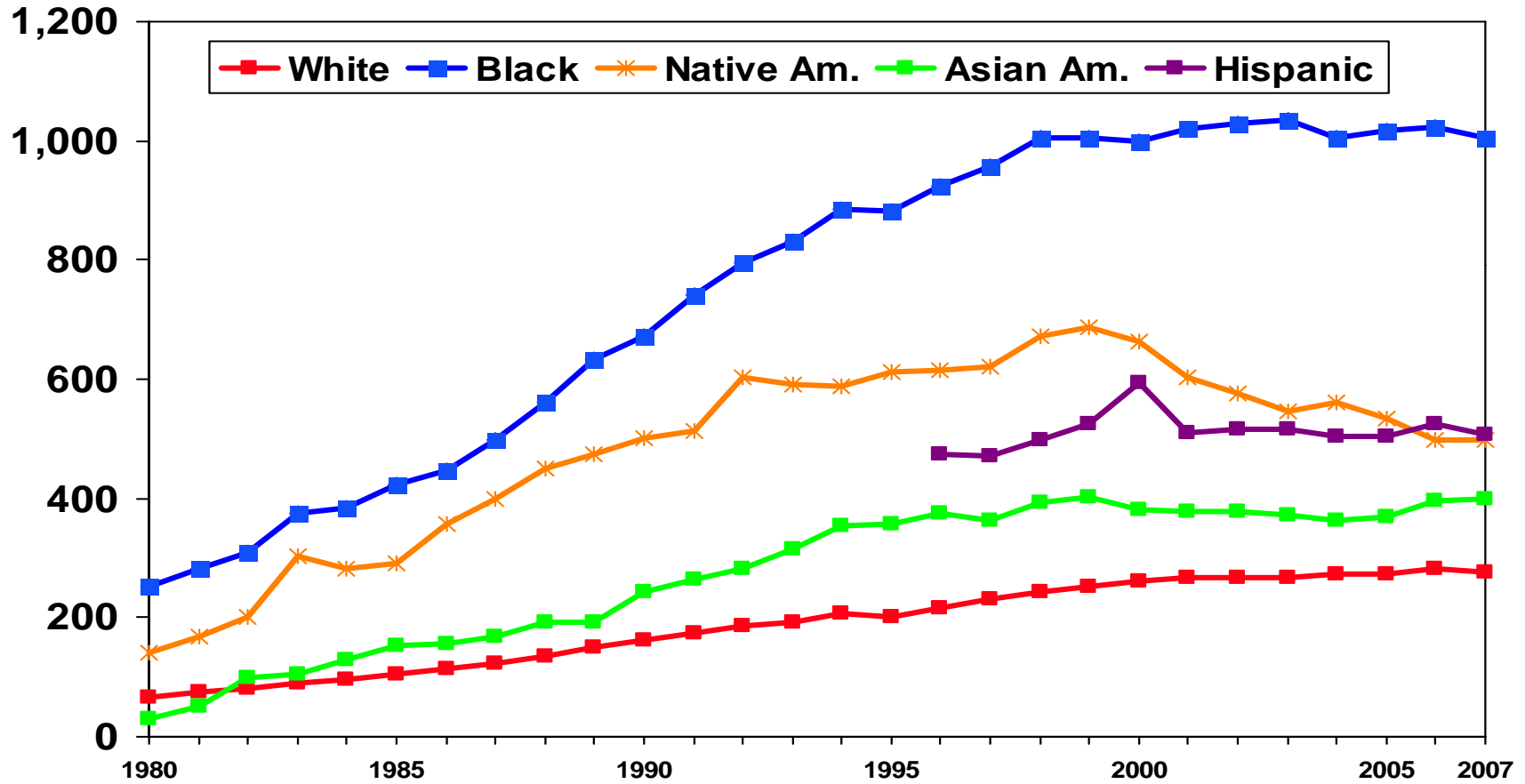
Source: 2009 ADR

# ESRD Incidence per Million by Race, by Age: 2005-2007 cohorts (Compared to white – 1.0)



Source: 2009 ADR

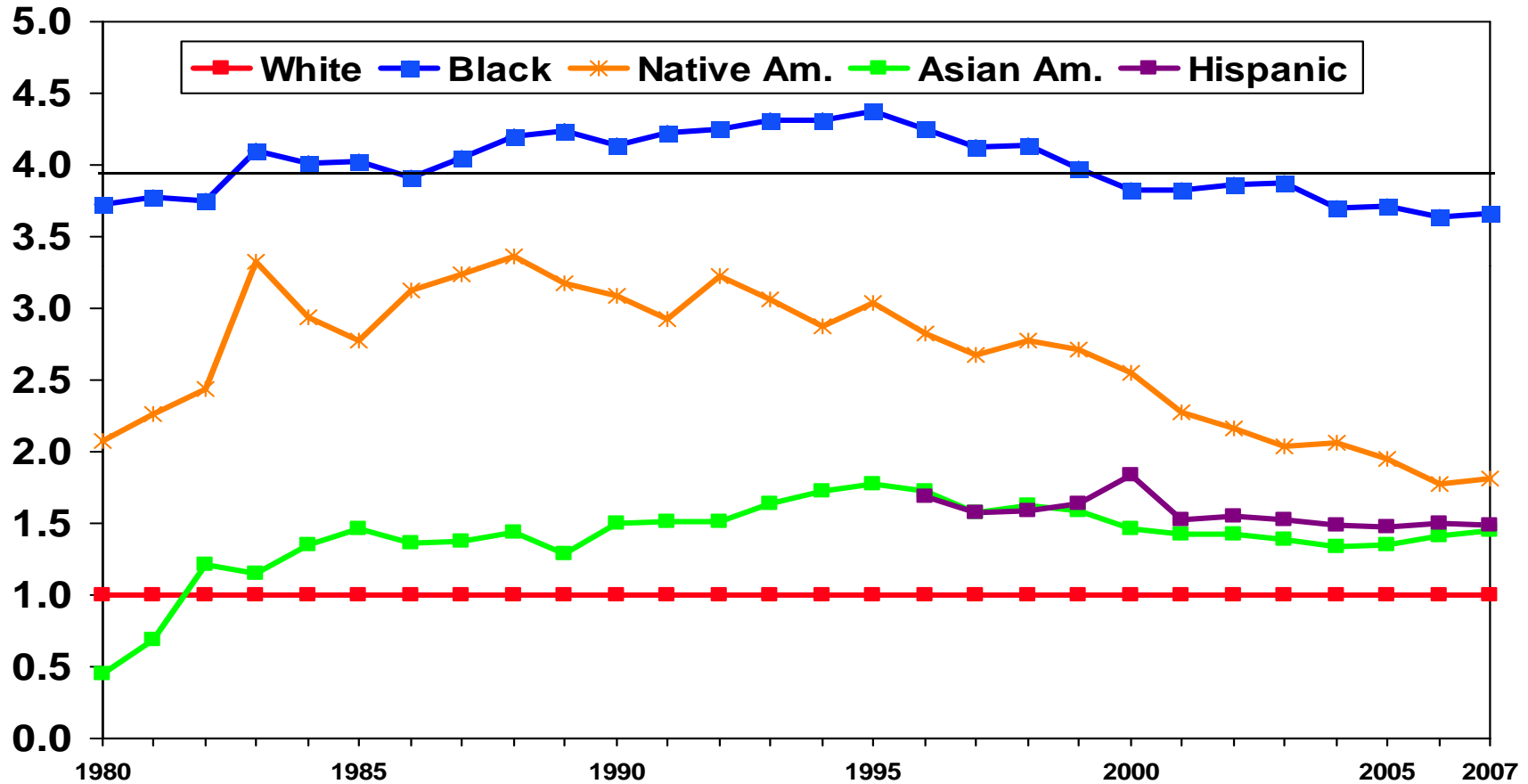
# ESRD Incidence per Million by Race: 1980 through 2007 (adjusted for age and sex)



Source: 2009 ADR

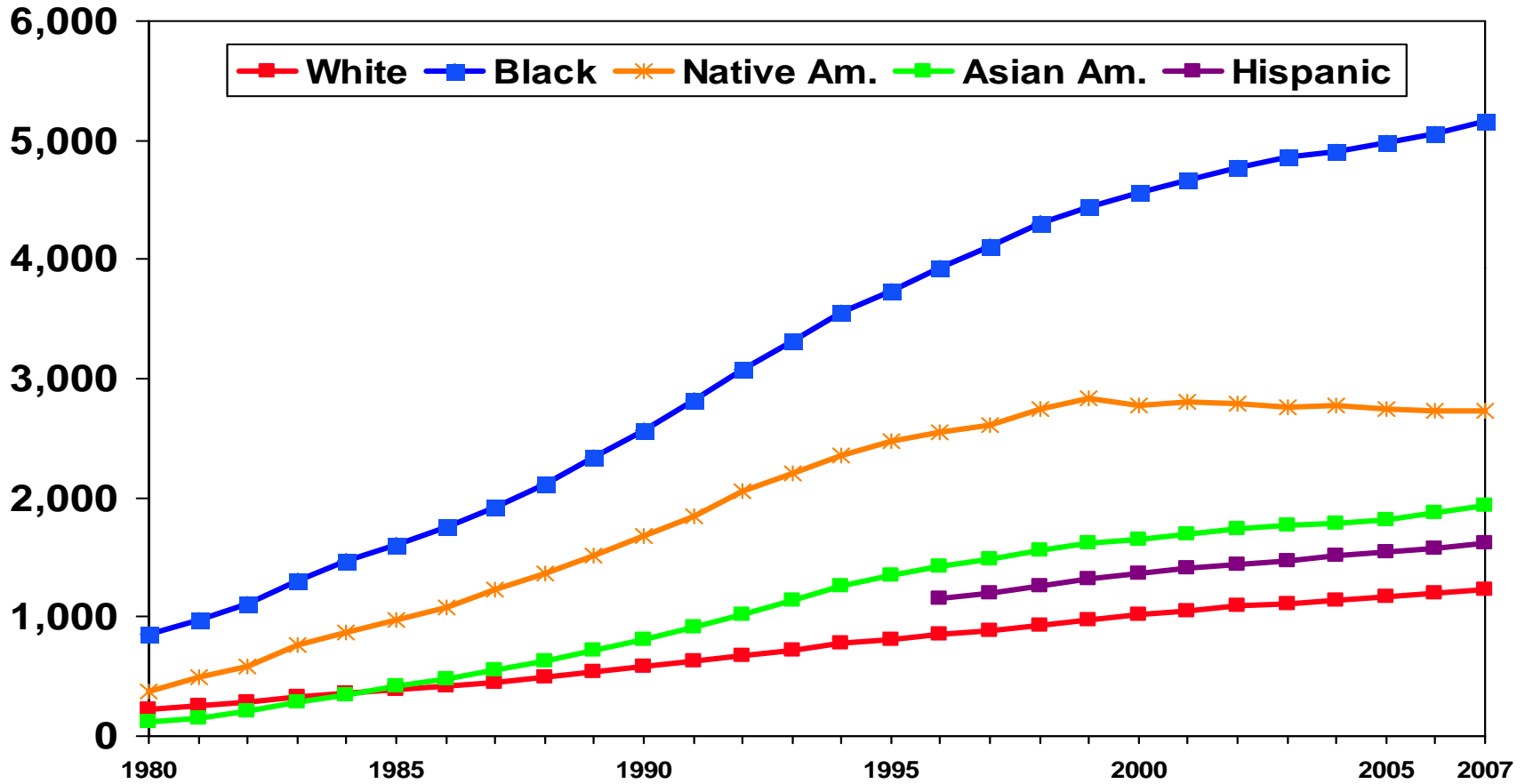
# ESRD Incidence by Race compared to White: 1980 through 2007 (adjusted for age and sex)

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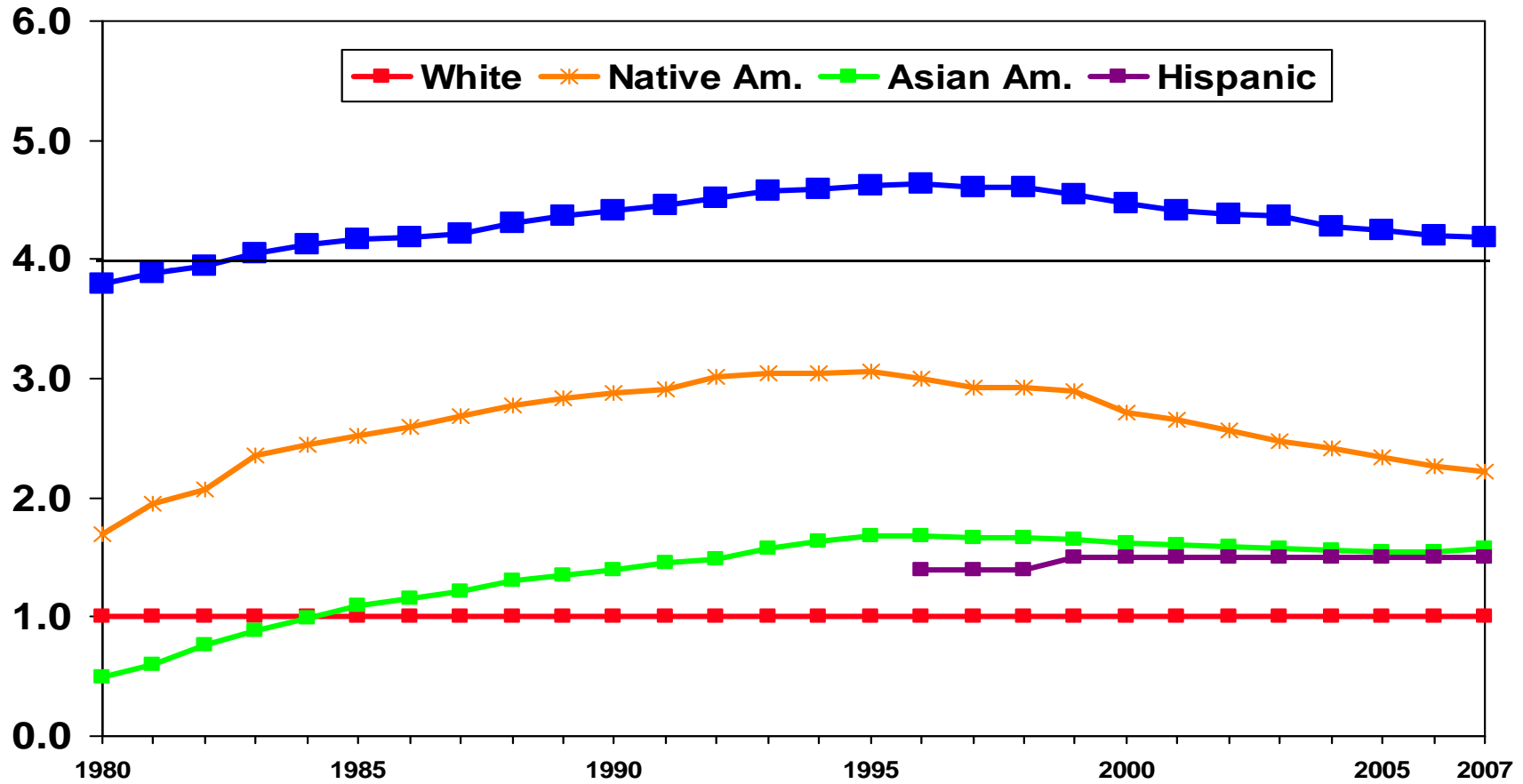
Source: 2009 ADR

# ESRD Prevalence per Million by Race: 1980 through 2007 (adjusted for age and sex)



Source: 2009 ADR

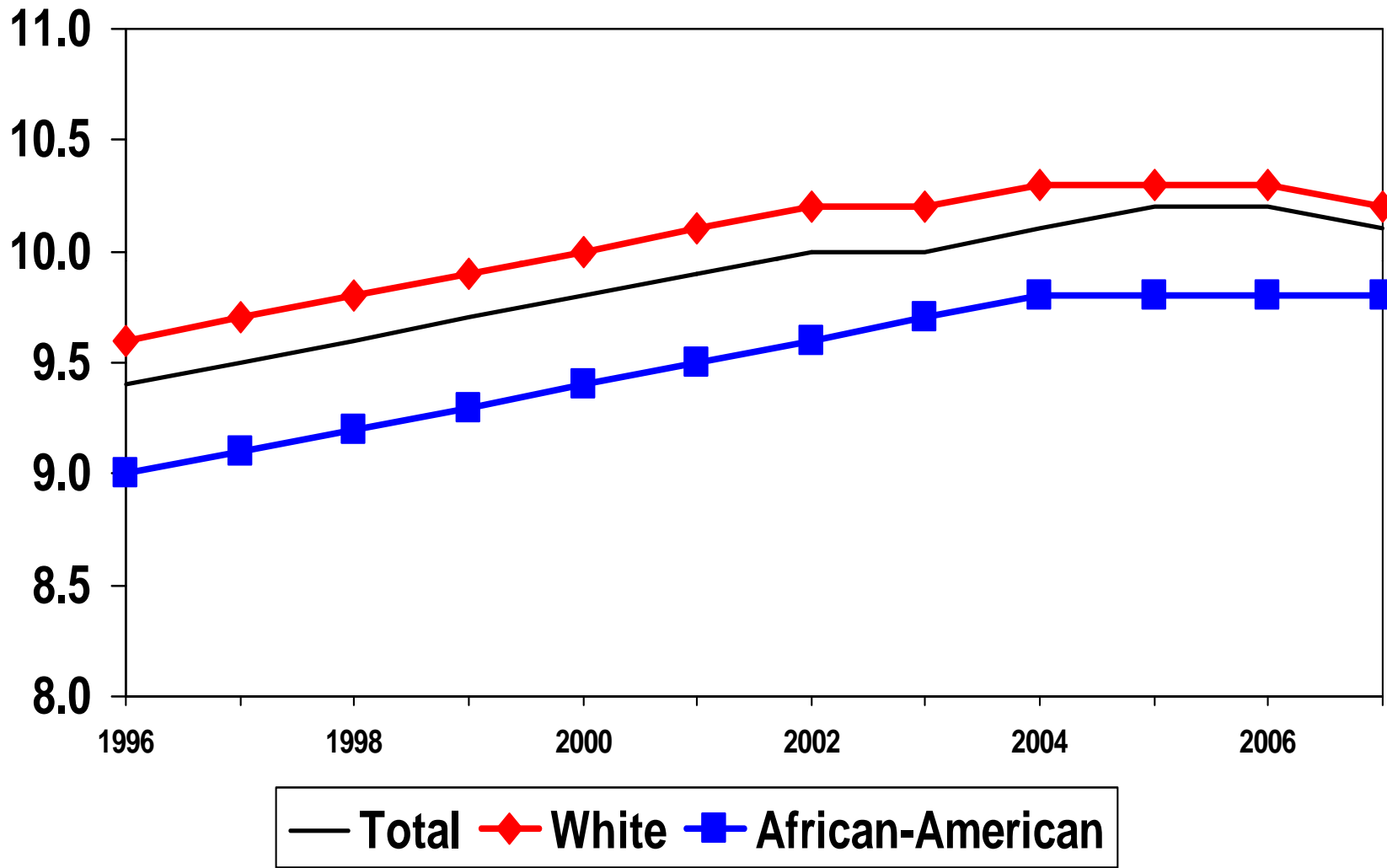
# ESRD Prevalence by Race compared to White: 1980 through 2007 (adjusted for age and sex)



Source: 2009 ADR

# Start of Dialysis

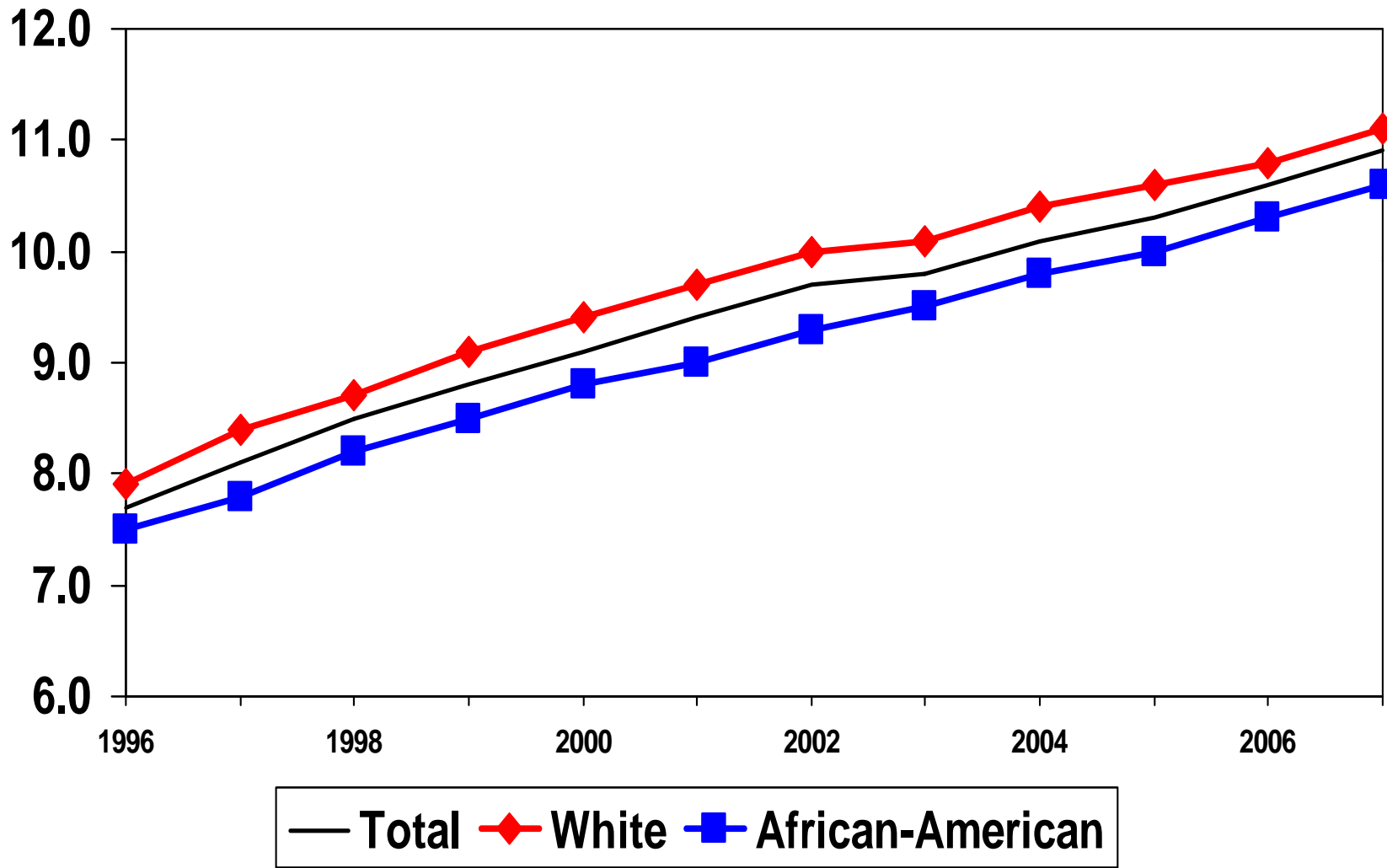
**Mean Hemoglobin (g/dl) at start of dialysis: by Race**  
Source: 2009USRDS Annual Data Report





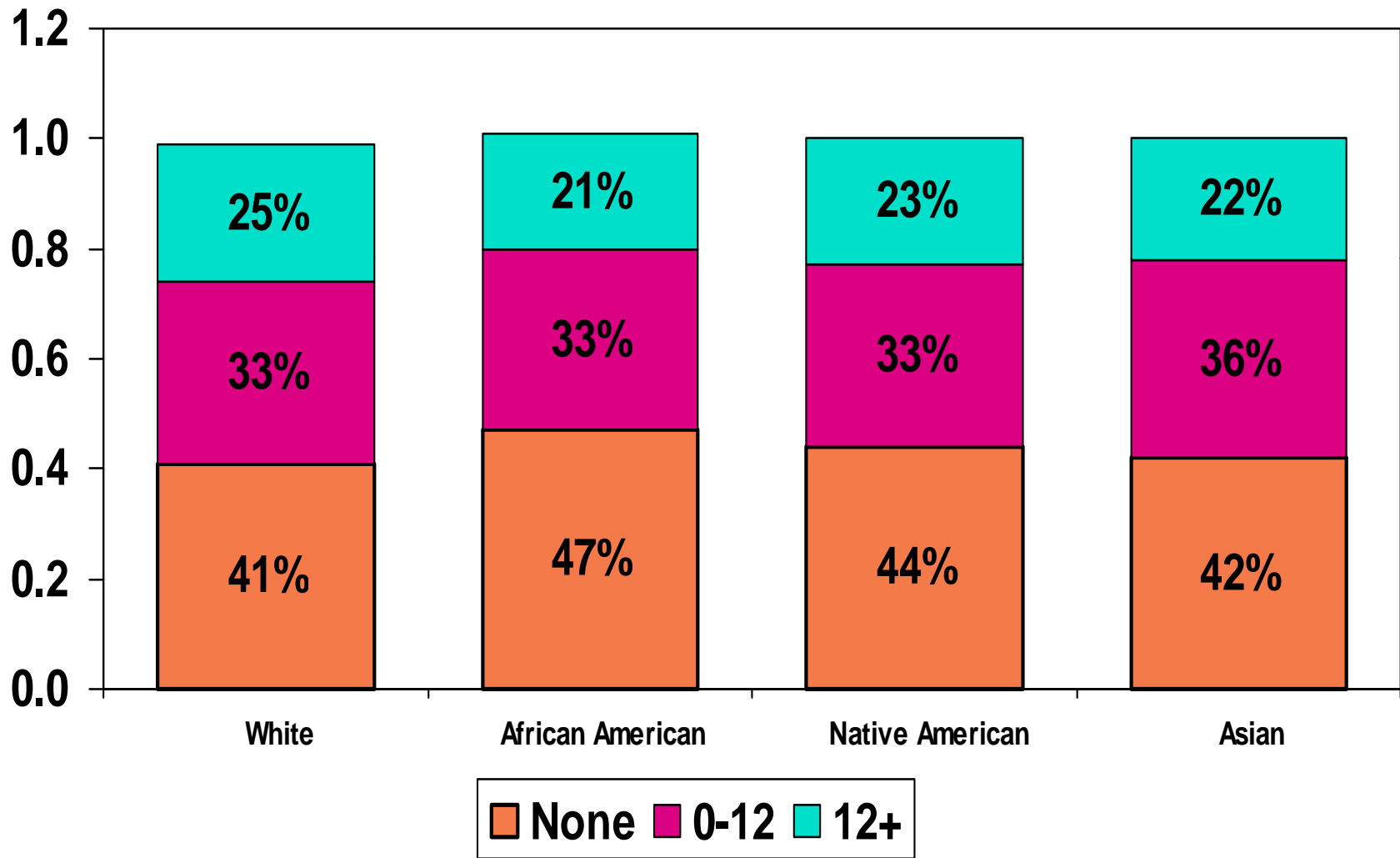
### Estimated GFR at start of dialysis: by Race

Source: 2008 USRDS Annual Data Report

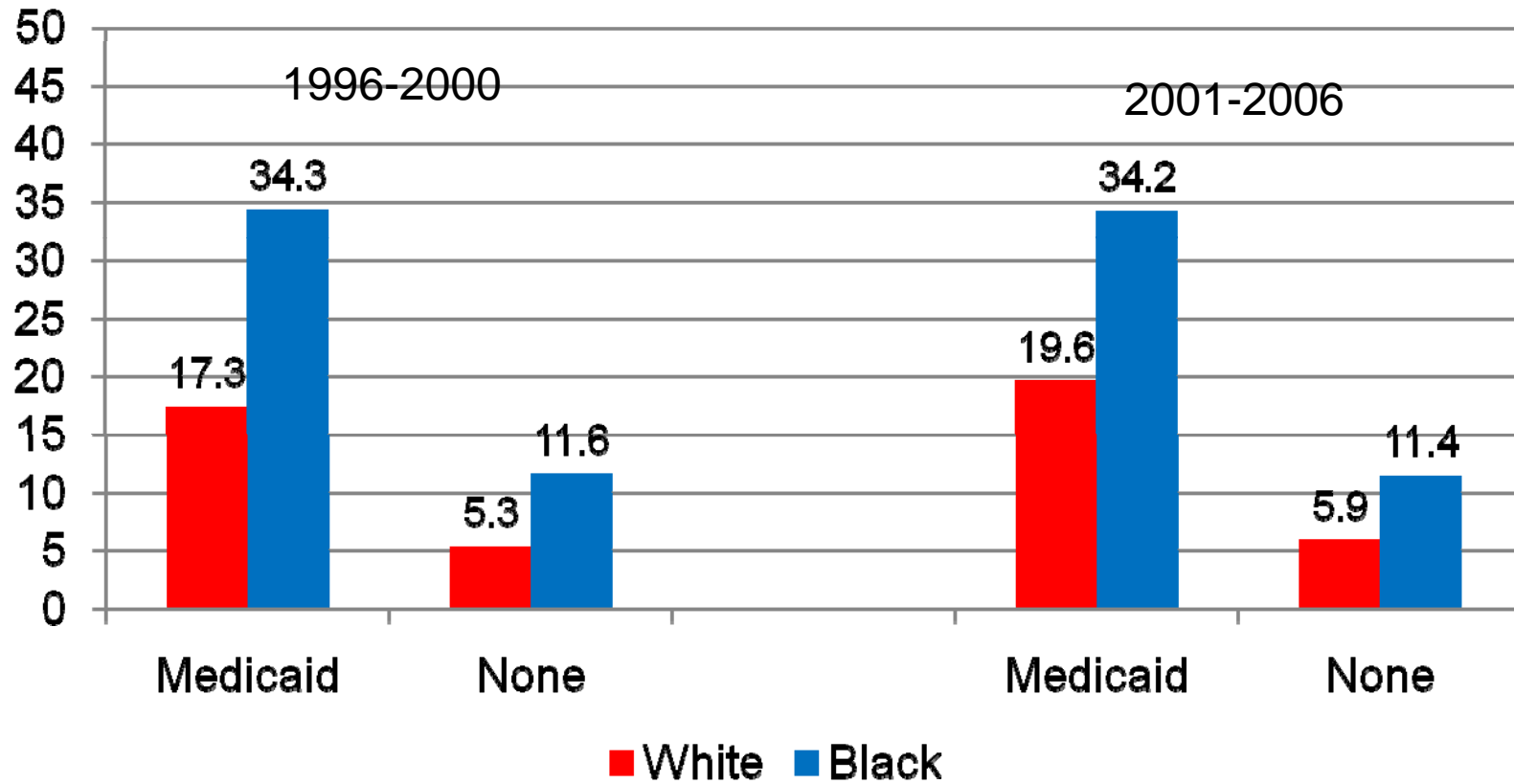


# Pre-ESRD Nephrologist Care: by Race 2007

Source: 2009 USRDS Annual Data Report

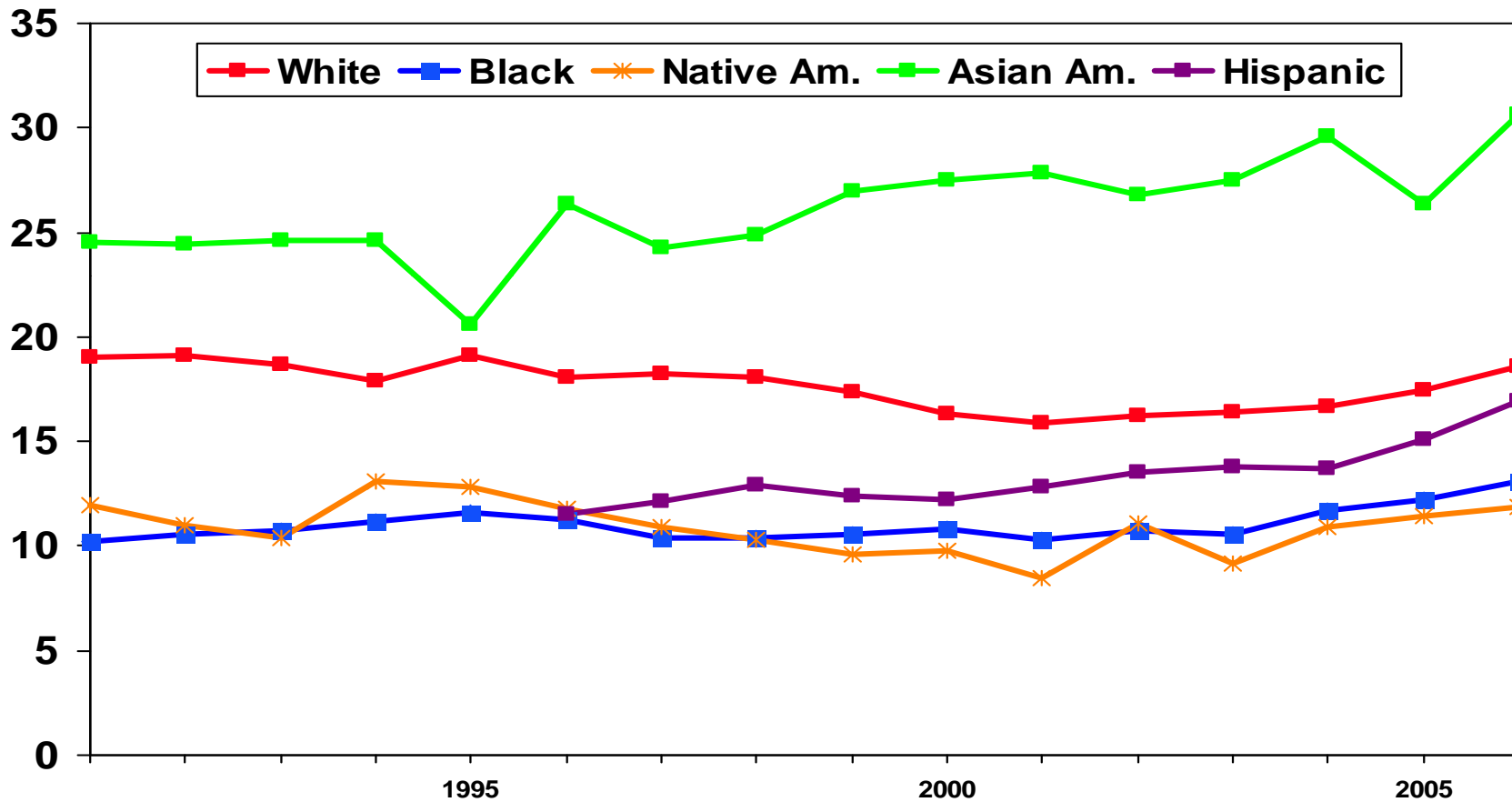


### Percent of Incident ESRD patients on Medicaid or with no Insurance: by Race



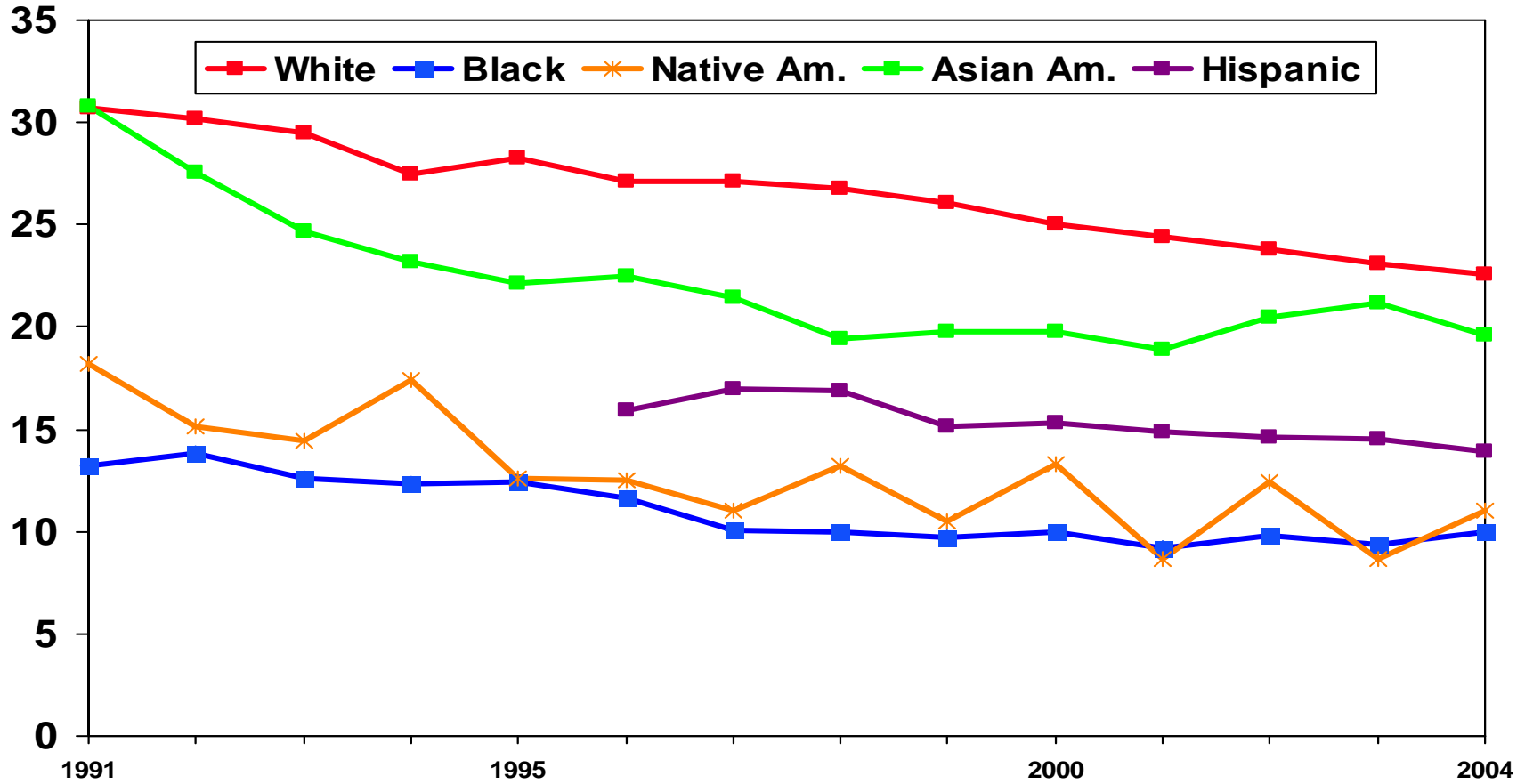
# Access to Transplantation

# Percent of Incident patients (LT 70 yr) waitlisted or transplanted within one year of ESRD by Race – HP 2010 goal



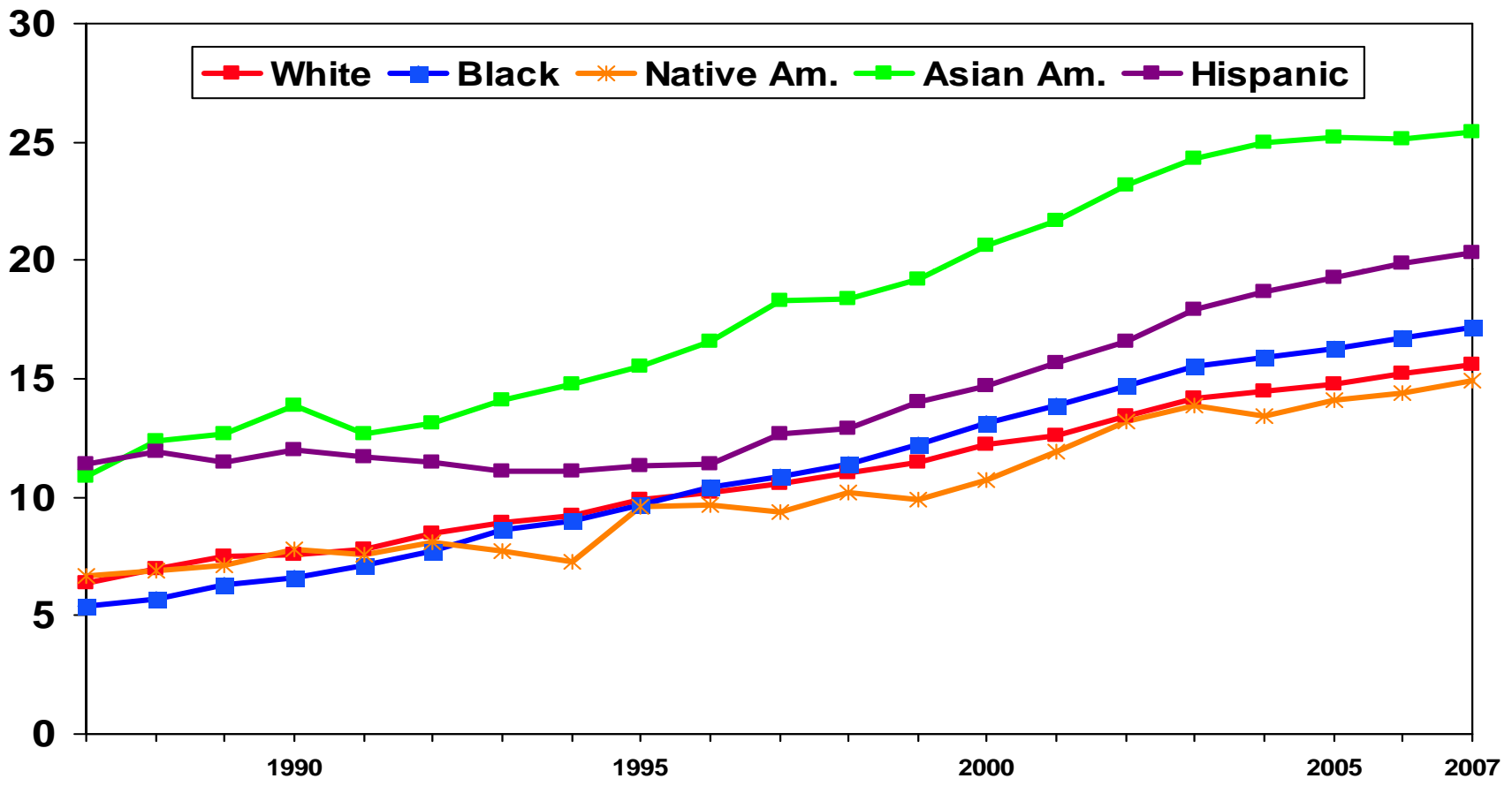
Source: 2009 ADR

# Percent of Incident patients (LT 70 yr) transplanted within three years of ESRD by Race – HP 2010 goal



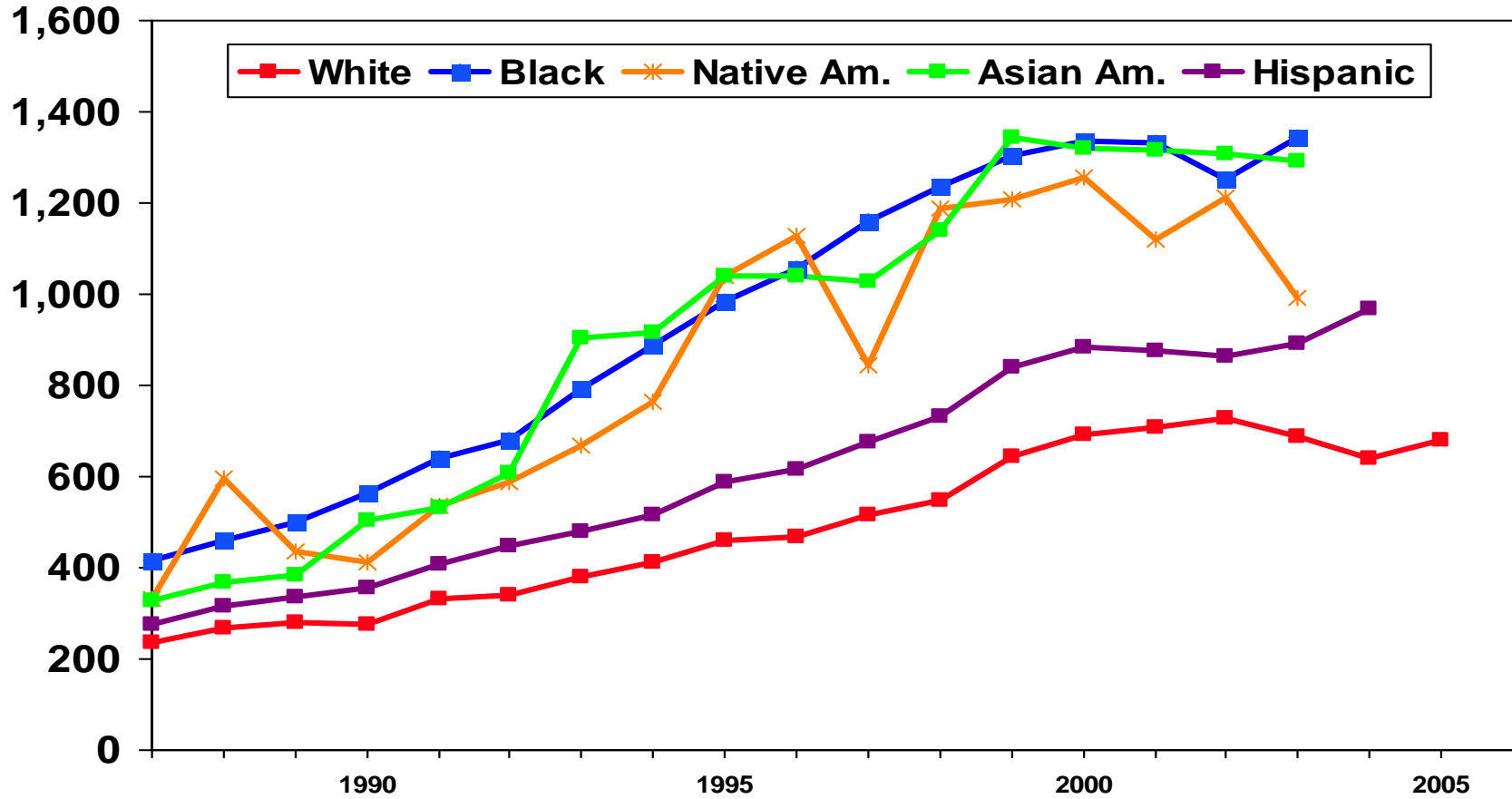
Source: 2009 ADR

# Percent of ESRD Dialysis patients waitlisted for a transplant 1987 through 2007)



Source: 2009 ADR

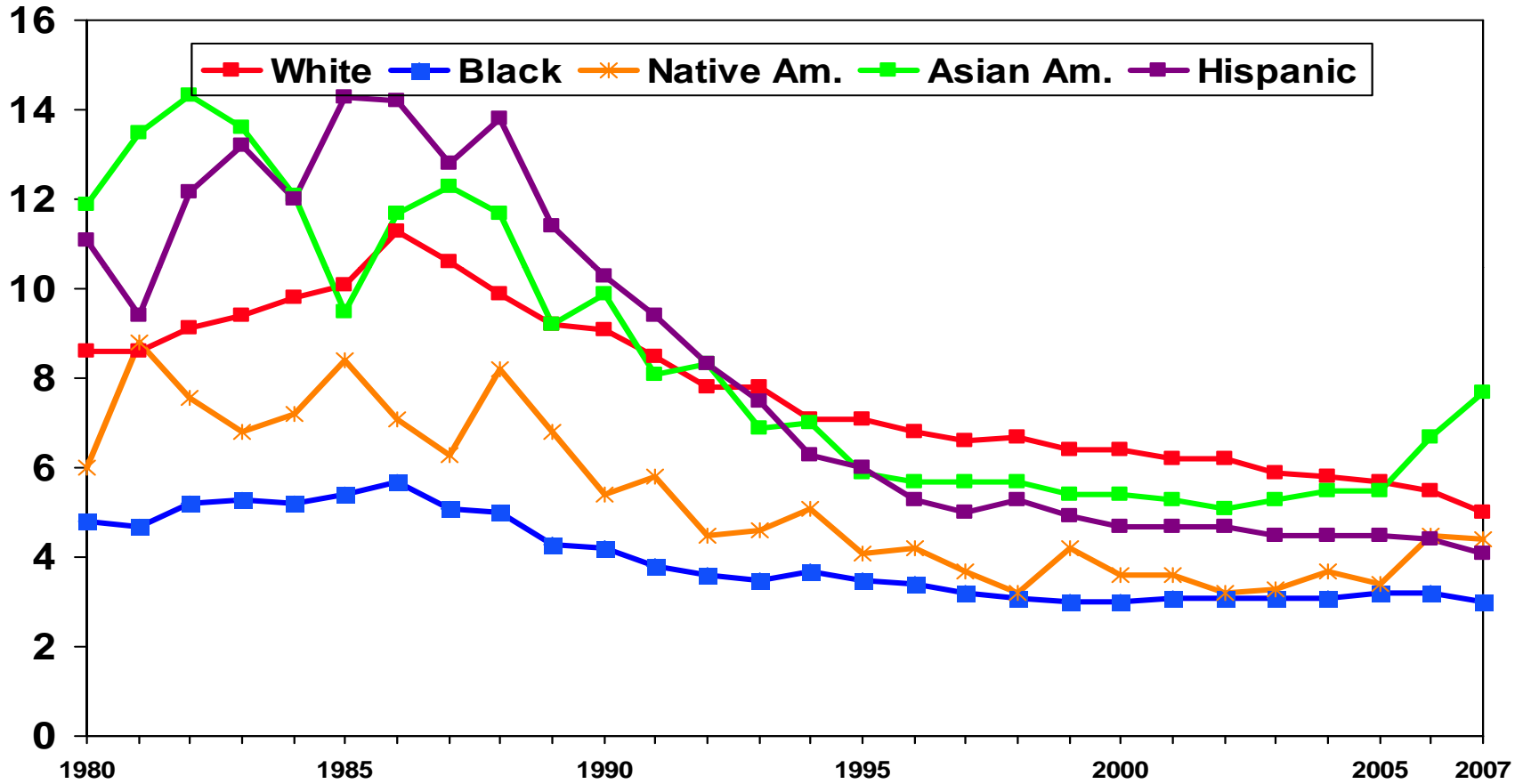
# Median time until transplant by Race



Source: 2009 ADR



# Percent of ESRD Dialysis patients transplanted 1980 through 2007)



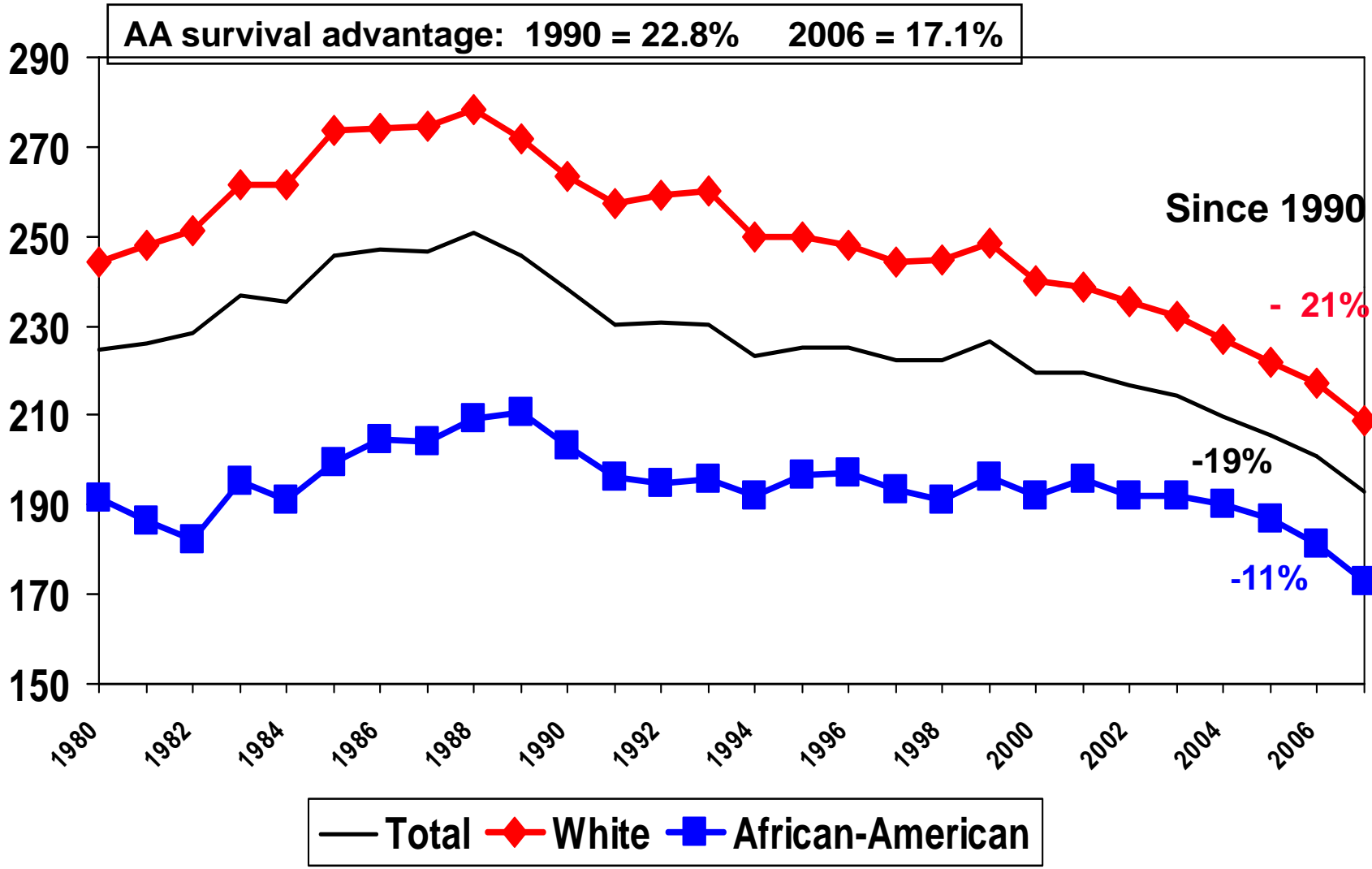
Source: 2009 ADR

# Outcomes

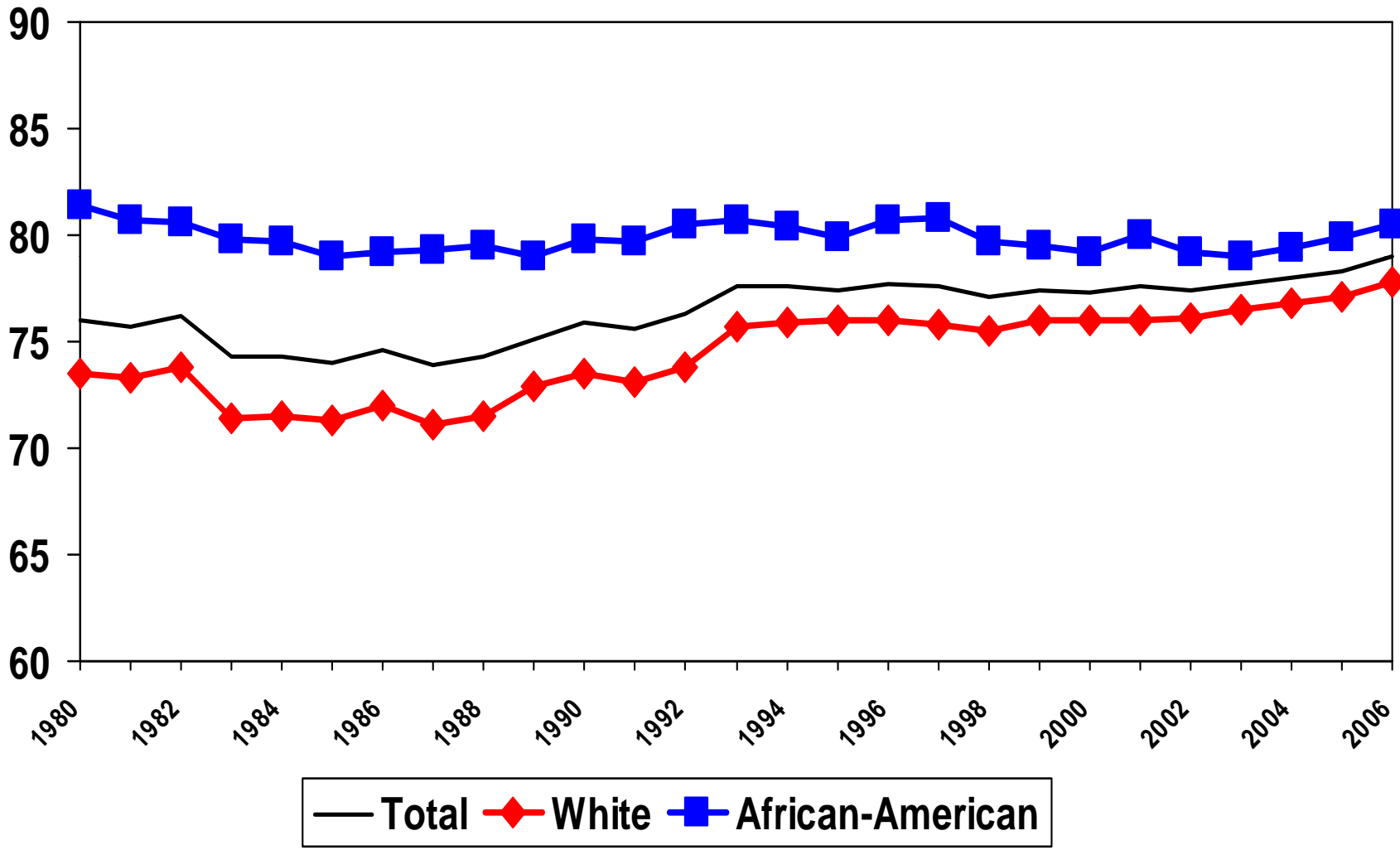
# Outcomes - Mortality

### Annual Mortality on Dialysis: by Race Adjusted for age, sex, and cause of renal failure

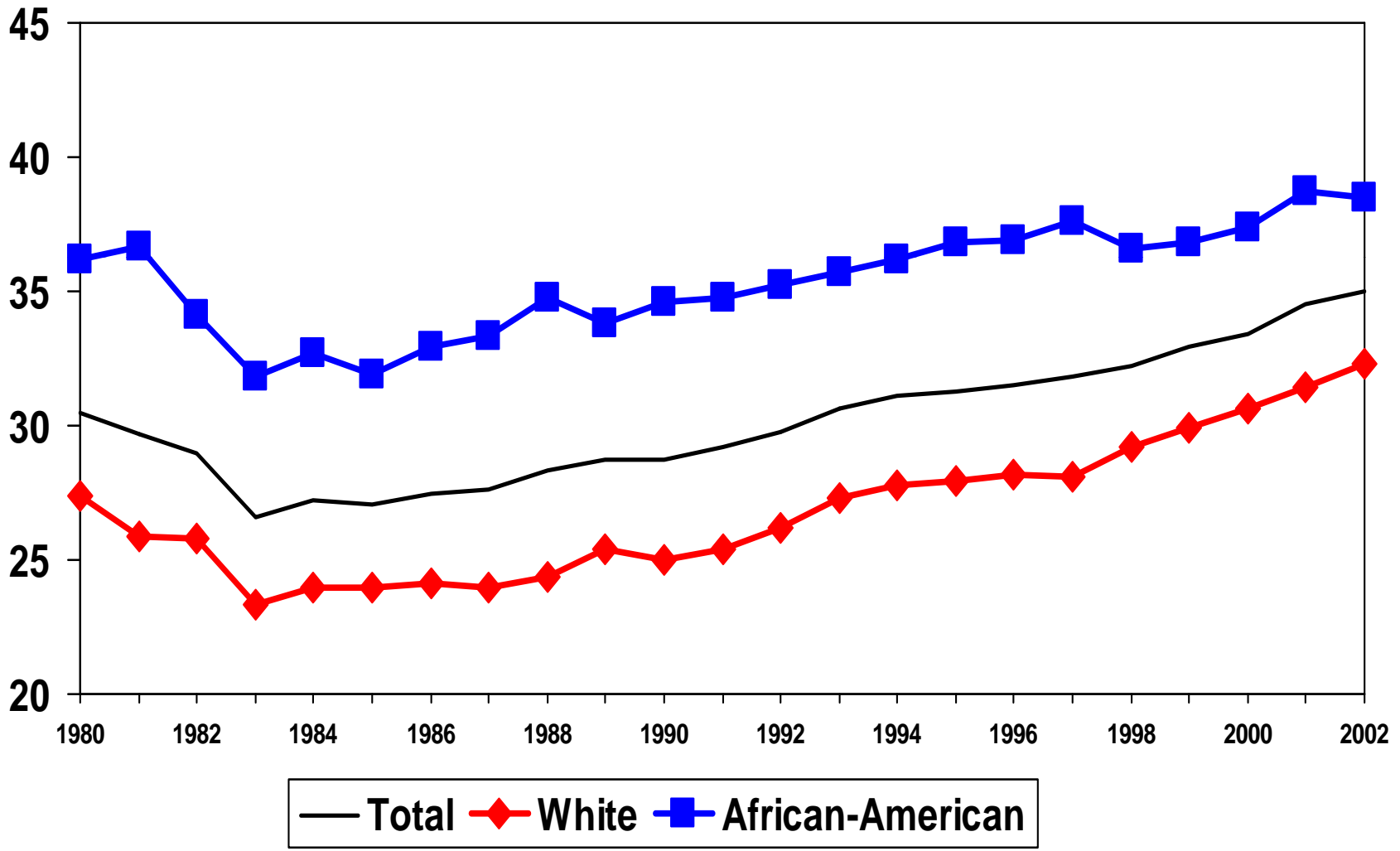
Source: 2009 USRDS Annual Data Report



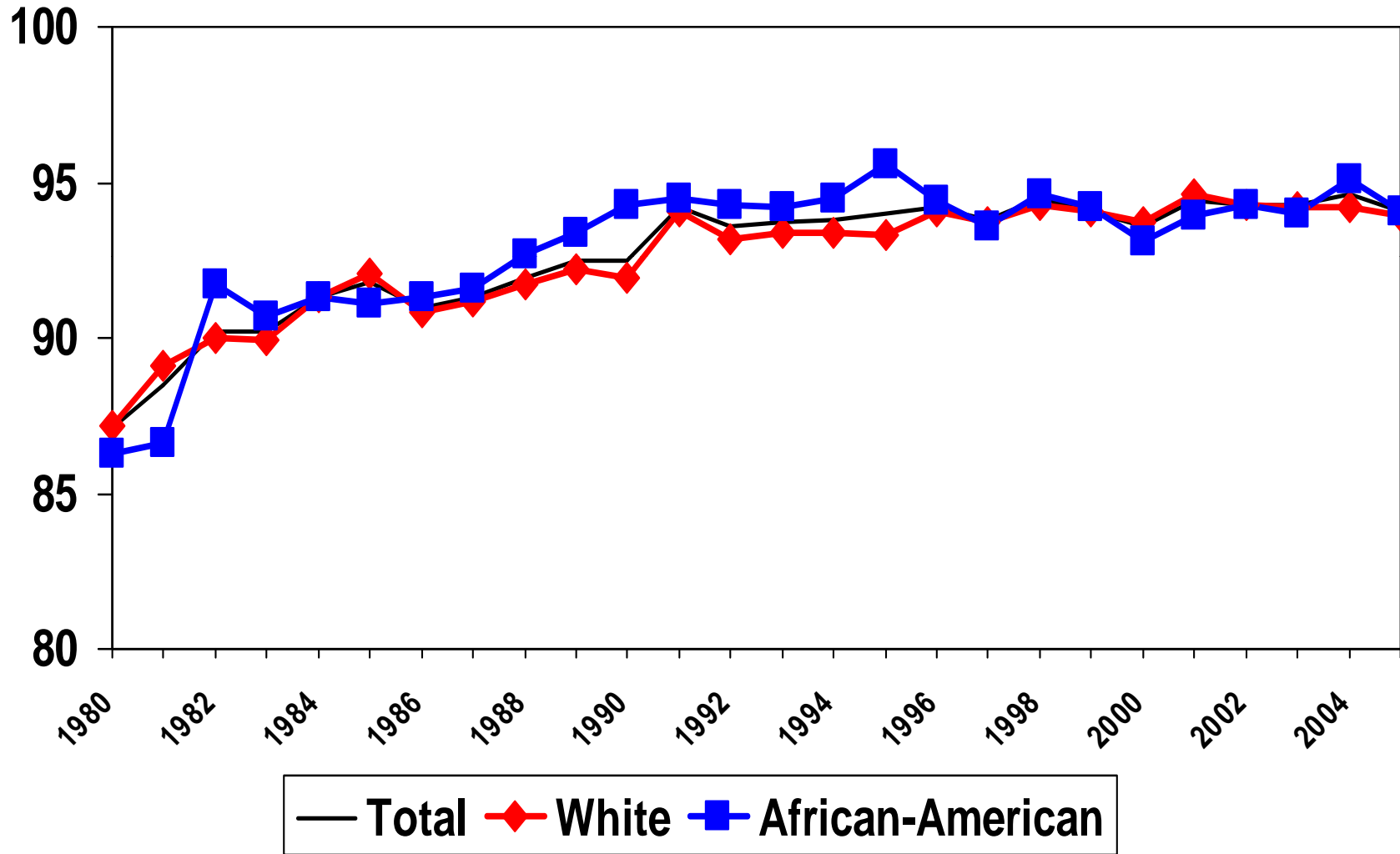
**One year survival on Dialysis: by Race**  
Adjusted for age, sex, and cause of renal failure  
Source: 2009 USRDS Annual Data Report



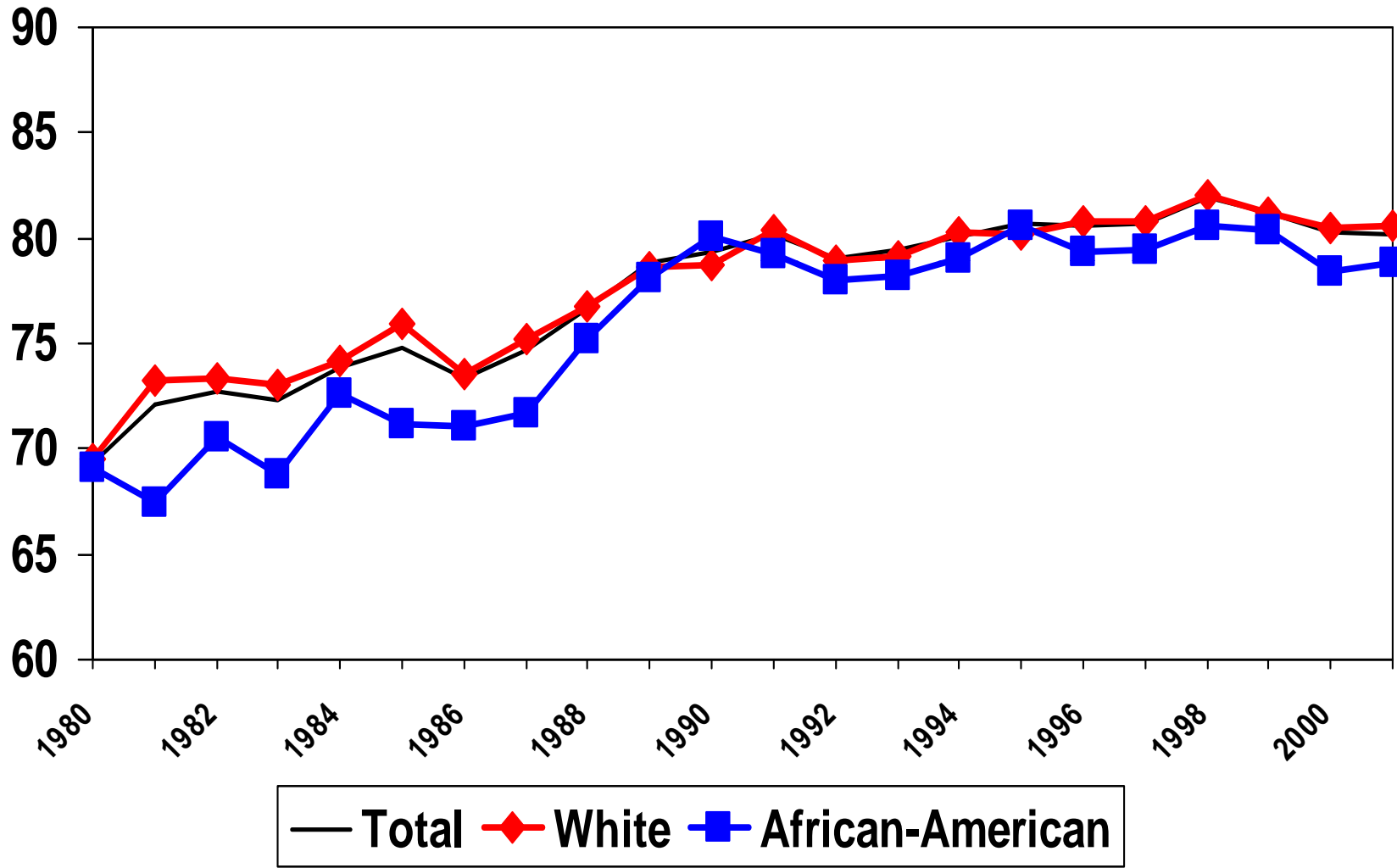
**Five year survival on Dialysis: by Race**  
Adjusted for age, sex, and cause of renal failure  
Source: 2009 USRDS Annual Data Report



**One year patient survival – 1<sup>st</sup> deceased donor Tx: by Race**  
Unadjusted for age, sex, and cause of renal failure  
Source: 2008 USRDS Annual Data Report



**Five year patient survival – 1<sup>st</sup> deceased donor Tx: by Race**  
**Unadjusted for age, sex, and cause of renal failure**  
 Source: 2008 USRDS Annual Data Report



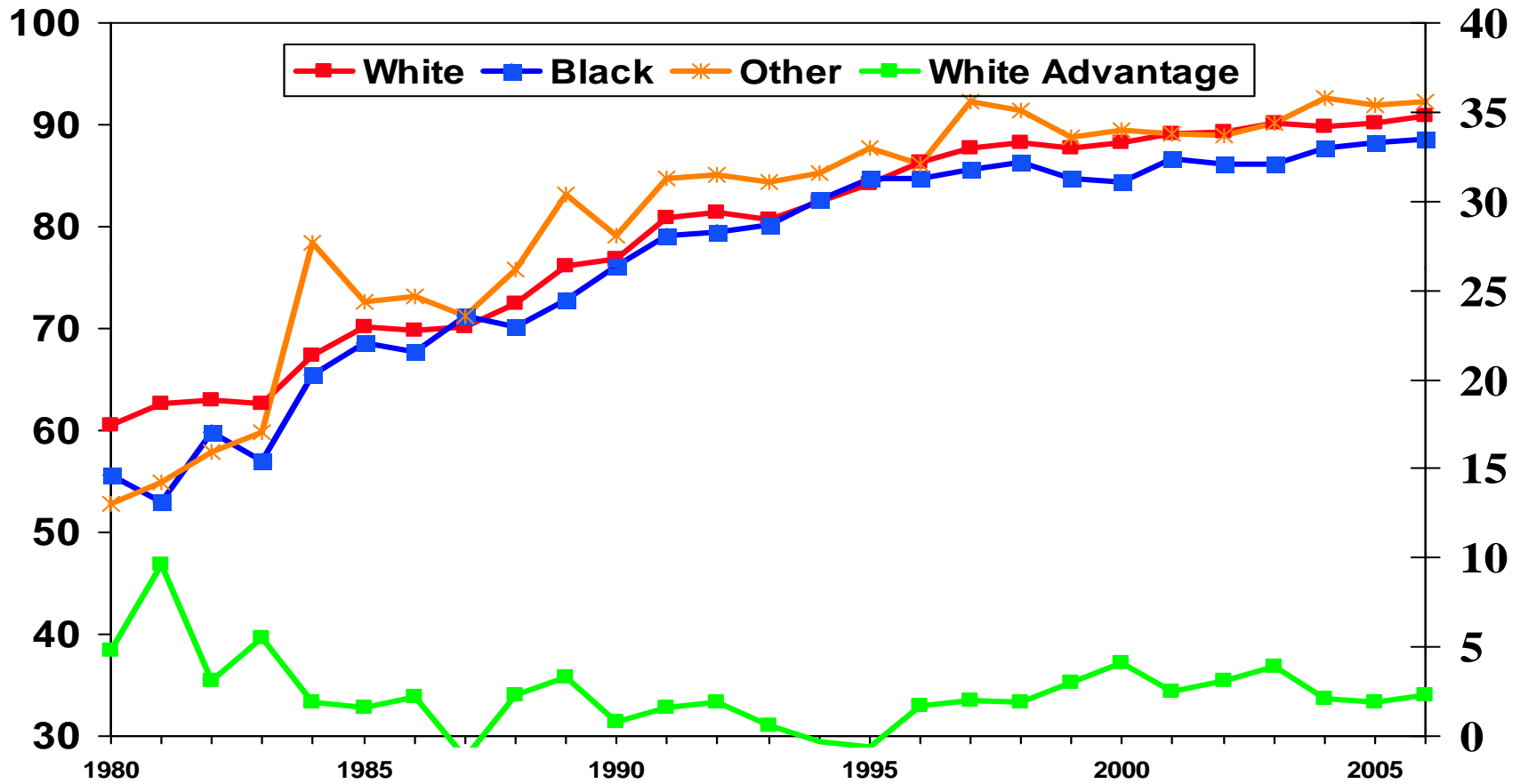


# Transplant Outcomes

# Transplant Graft Survival rates by Race

## Deceased donor: 1 year

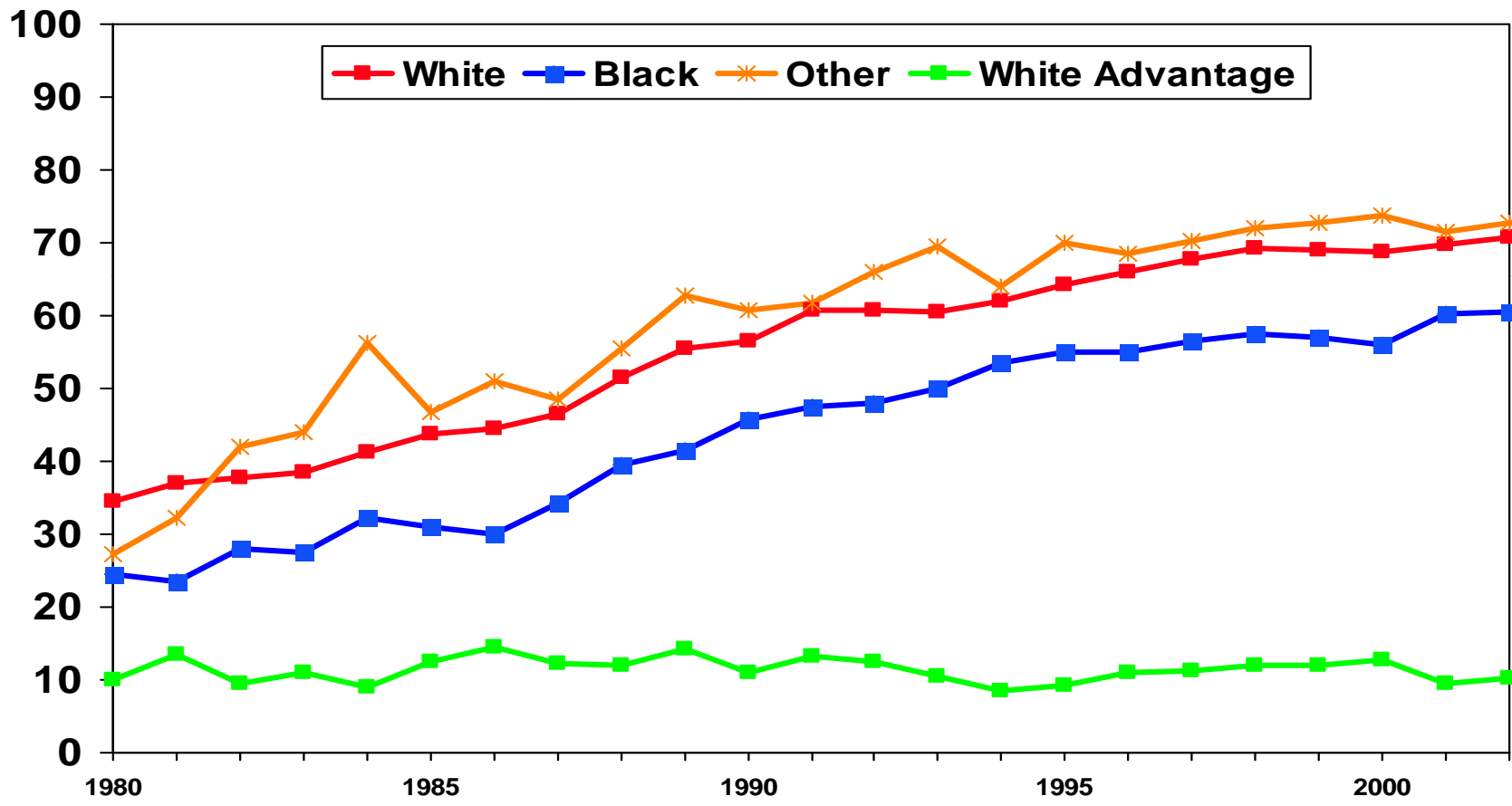
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Source: 2009 ADR

# Transplant Graft Survival rates by Race

## Deceased donor: 5 year

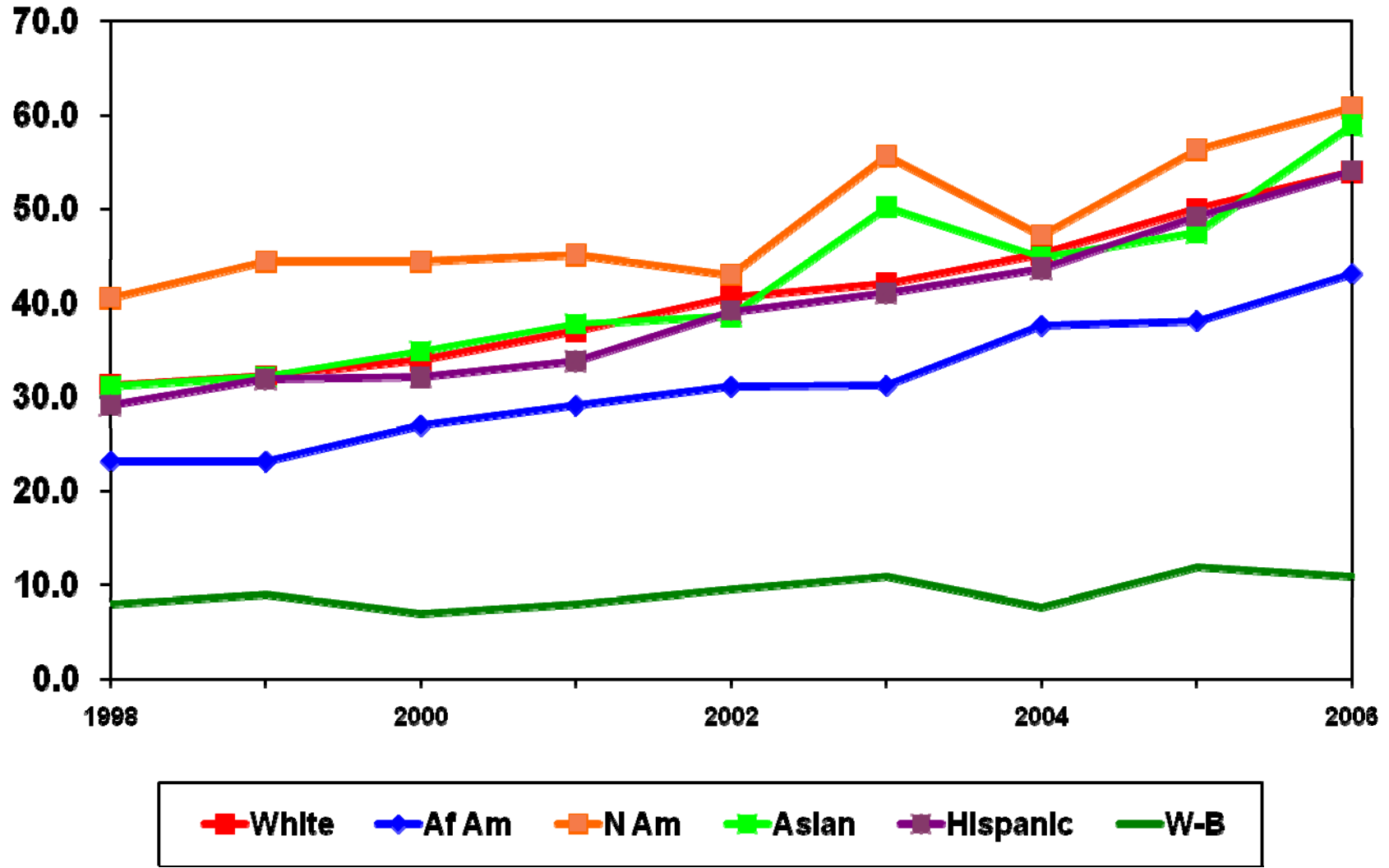


Source: 2009 ADR

# Intermediate Dialysis Outcomes

# Percentage of patients with an arteriovenous fistula, by race/ethnicity

Source: 2009USRDS Annual Data Report



# Report Card

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**Chronic Kidney Disease**

**Unknown**

**End Stage Renal Disease**

**D**

**Access to Transplantation**

**C-**

**Outcomes**

**Mortality**

**A**

**Transplant Graft Survival**

**B+**

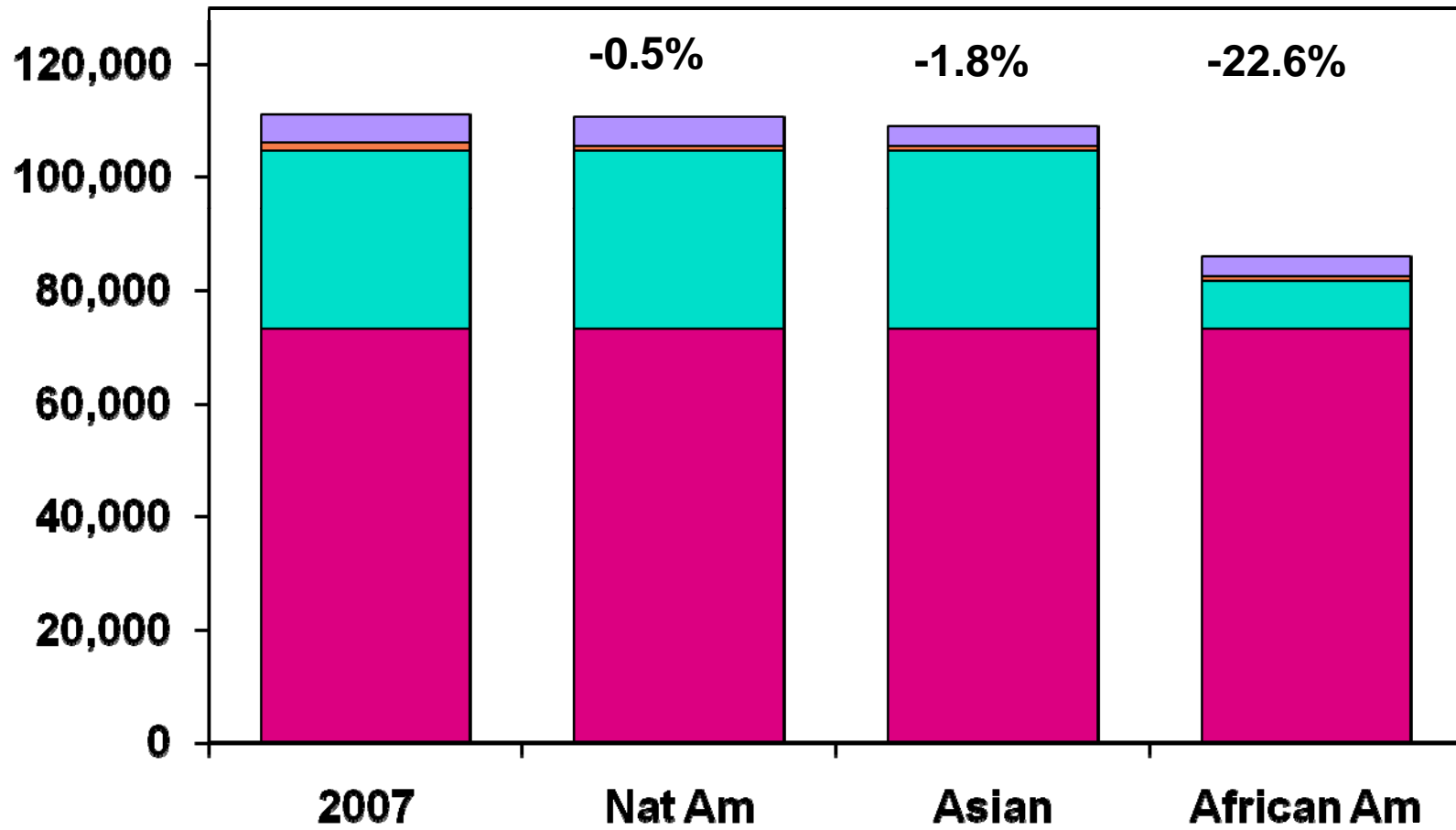
**Intermediate outcomes**

**fistula**

**C**

# ESRD Incidence in 2007: by Race

## Impact of eliminating racial disparity



**Thank You**