Racial and Ethnic Health Disparities in TRICARE

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Background

- Health disparities a serious problem in the U.S.
- Federal government major provider and financer of health care for minority populations
- TRICARE - the DoD's health care program
  - Those entitled to benefits during or consequent to service
  - Families and survivors of these members
  - Coverage provided through 5 separate programs
- Equity in health care part of the larger DoD mission to ensure "equality of treatment and opportunity"
Study Motivation

- Prior studies examine disparities in other federally-funded systems of care
  - Many have found fewer disparities

- Few studies have examined the TRICARE program
  - Very diverse population
  - Common benefits removes some variation in benefit

- Determine whether patterns of disparities observed in U.S. healthcare system are present in TRICARE
2007 Health Care Survey of DoD Beneficiaries (HCSDB)

- Quarterly survey of active duty military, retirees, and family
- Stratified random sample of 50,000 adult beneficiaries
- Overall response rate 25.1% but wide variation
  - Active duty: 15.6%
  - Retirees aged 65 or older: 77%
- Sample sizes increased to account for survey nonresponse
- Weights included for nonresponse and sampling design
Methods

- Descriptive analysis comparing 2007 HCSDB with:
  - 2006 National CAHPS® Benchmarking Database (NCBD) 3.0
    - Used to compare health status, access, and satisfaction
  - AHRQ’s 2007 National Healthcare Disparities Report (NHDR)
    - Used to compare data on use of preventives services

- Stratifying variables
  - Race/ethnicity
  - Active duty status
Outcome Measures

- **Health status**
  - Self rated health

- **Access to care**
  - Ability to find an acceptable personal doctor or nurse
  - Ability to see a specialist when needed

- **Satisfaction with care**
  - Doctor listened to patient’s concerns
  - Doctor was courteous and respectful

- **Use of preventive services**
  - Smoking cessation counseling
  - Colon cancer screening
  - Pap smear
  - Mammography
  - Annual flu shot
Statistical Analyses

- Two sets of comparisons for each measure
  - Blacks and Hispanics versus whites within category
  - Magnitude of disparity versus civilian health plans
- t-tests of differences in proportions
  - Bonferroni adjustment for multiple comparisons
- Test statistics and standard errors estimated to account for complex sample design
# Sociodemographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>27.0</td>
<td>26.1</td>
<td>39.9</td>
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<tr>
<td>35-64</td>
<td>62.7</td>
<td>69.1</td>
<td>56.0</td>
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<tr>
<td>65 or older</td>
<td>10.2</td>
<td>4.8</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>49.9</td>
<td>52.6</td>
<td>45.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>20.6</td>
<td>20.4</td>
<td>24.0</td>
</tr>
<tr>
<td>Some college</td>
<td>40.0</td>
<td>50.5</td>
<td>47.4</td>
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<tr>
<td>College grad</td>
<td>39.3</td>
<td>29.2</td>
<td>28.7</td>
</tr>
<tr>
<td><strong>Duty status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active duty</td>
<td>54.5</td>
<td>57.0</td>
<td>65.6</td>
</tr>
<tr>
<td>Retirees/survivors</td>
<td>45.5</td>
<td>43.0</td>
<td>34.4</td>
</tr>
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</table>
Health Status

% Reporting Good/Excellent Self-rated Health

NOTE: Civilian data based on 2006 National CAHPS® Benchmarking Database, Commercial
*Indicates significant difference (p<0.05), compared to whites
†Indicates significant difference (p<0.05), compared to civilian plans
Access to Care

% Reporting No Problem Seeing a Specialist

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian</td>
<td>79.5</td>
<td>78.7</td>
<td>72.4*</td>
</tr>
<tr>
<td>Active Duty</td>
<td>55.1</td>
<td>54.5†</td>
<td>61.0*†</td>
</tr>
<tr>
<td>Retired</td>
<td>79.7</td>
<td>75.2*</td>
<td>72.2*</td>
</tr>
</tbody>
</table>

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†Indicates significant difference (p<0.05), compared to civilian plans
Satisfaction with Care

% Saying Doctor Showed Respect

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</tr>
</thead>
<tbody>
<tr>
<td>Civilian</td>
<td>94.1</td>
<td>92.7*</td>
<td>92.6*</td>
</tr>
<tr>
<td>Active Duty</td>
<td>82.0</td>
<td>88.3*</td>
<td>85.2*†</td>
</tr>
<tr>
<td>Retired</td>
<td>93.8</td>
<td>91.5*</td>
<td>92.4</td>
</tr>
</tbody>
</table>

NOTE: Civilian data based on 2006 National CAHPS® Benchmarking Database, Commercial
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†Indicates significant difference (p<0.05), compared to civilian plans
Use of Preventive Services

% Receiving Smoking Cessation Counseling

NOTE: Civilian data based on 2007 National Healthcare Disparities Report
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Use of Preventive Services

% Receiving Pap Smear

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<thead>
<tr>
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<th>Active Duty</th>
<th>Retired</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>79.1</td>
<td>94.0</td>
<td>75.3</td>
</tr>
<tr>
<td>Black</td>
<td>80.2</td>
<td>96.2*</td>
<td>86.2*†</td>
</tr>
<tr>
<td>Hispanic</td>
<td>74.4*</td>
<td>92.7</td>
<td>82.2*†</td>
</tr>
</tbody>
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Discussion

- Some disparities exist in the TRICARE program
  - Disparities are smaller or reversed from those in civilian plans

- Findings could help guide health care reform
  - Are coverage and access sufficient to eliminate disparities?
  - Cultural aspects of DoD and MHS

- Need for more research on disparities in TRICARE
  - Better collection of data on race/ethnicity
  - Link HSCDB with claims to enable multivariate models
  - Look at treatments and outcomes