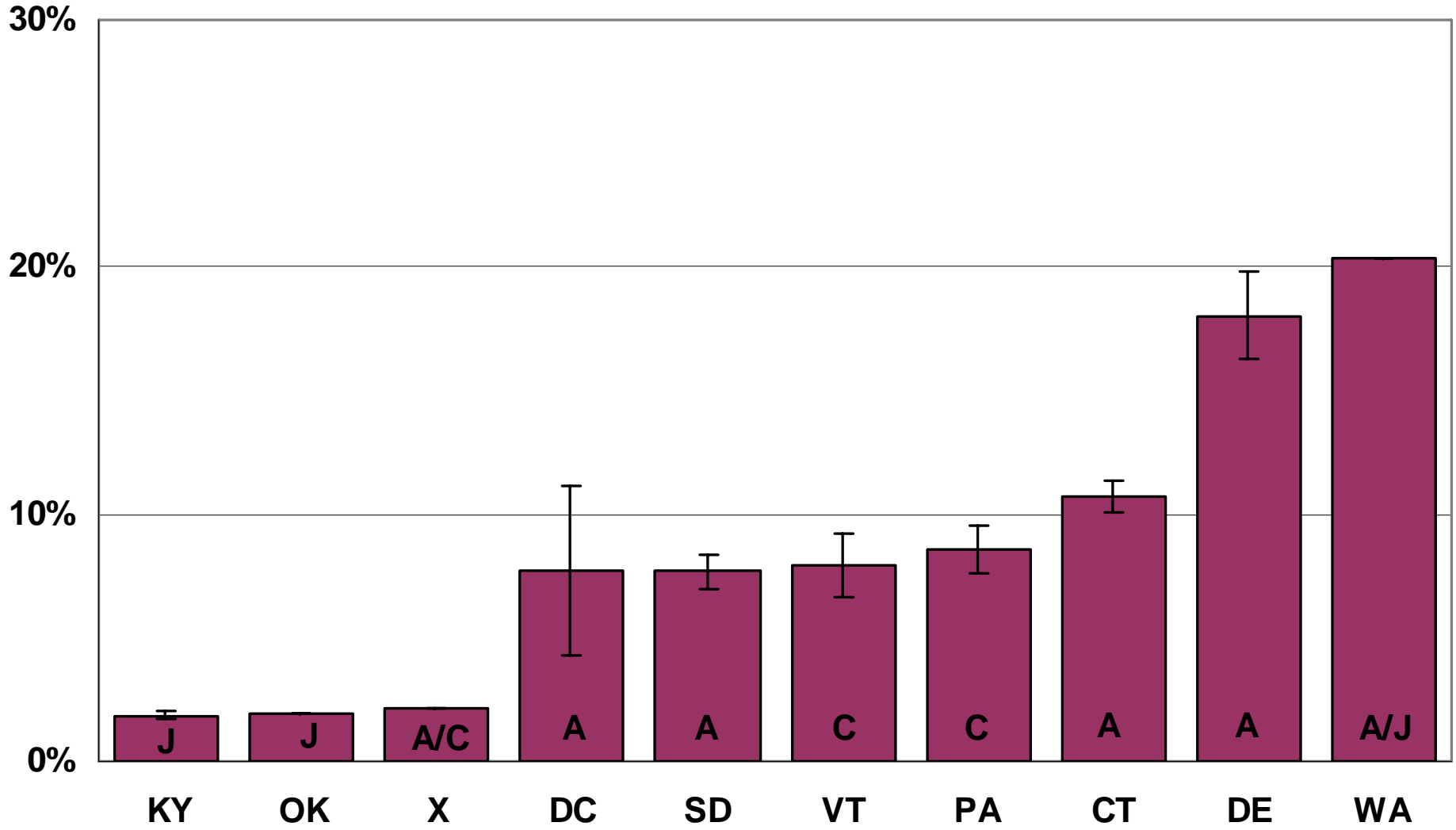


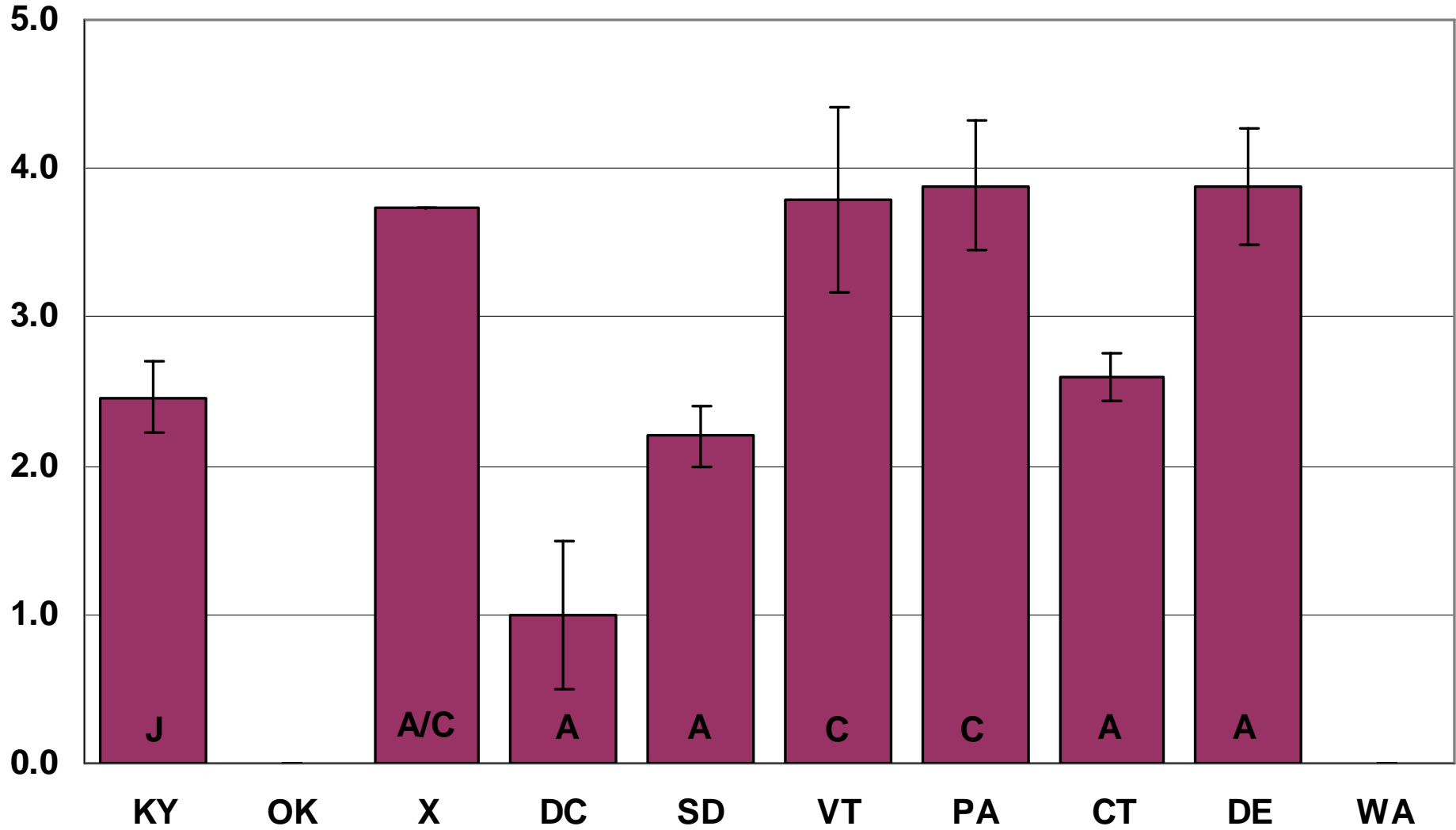
Data Driven System Transformation

The Bristol Observatory
&
The Vermont Mental Health Performance Indicator Project

Rate of Mental Health Criminal Justice Involvement



Relative Risk of Criminal Justice Involvement



Transformation

A marked change
in appearance or character.

The operation of changing one
expression into another in
accordance with
a mathematical rule.

System

System

A unified whole
made up of independent
but inter-related elements.

System

The Unit of Analysis is:

A Treatment Program

A Service Sector

A Complex System of Care

System

The Unit of Analysis is:

A Treatment Program

A Service Sector

A Complex System of Care

NOT A PERSON

System Attributes

Size - Shape

Segregation / Integration

Access - Outcomes

Practice Patterns

Flow

Data Driven

Data Driven

Measure System

Share the Data

System Measures Prompt Change

Measure System Again

Questions

How does your state compare?

How do these data compare to values?

NOT

Why is the system like it is?

What would change the system?

National **O**utcomes **M**easure**S**

NOMs

Criminal Justice
Access to Care
Housing

Access to Care

Special Populations

Hospitalized

Addison

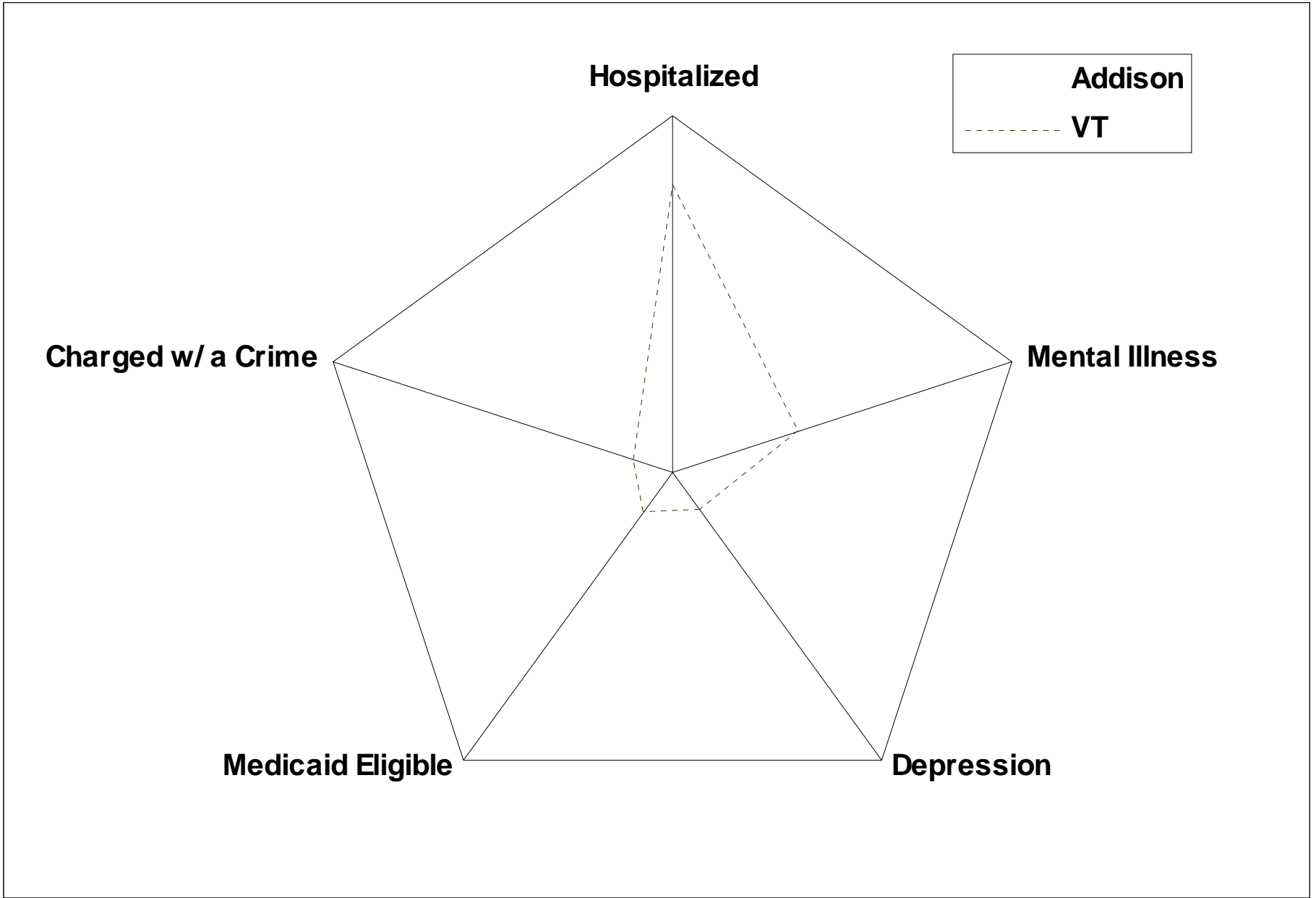
VT

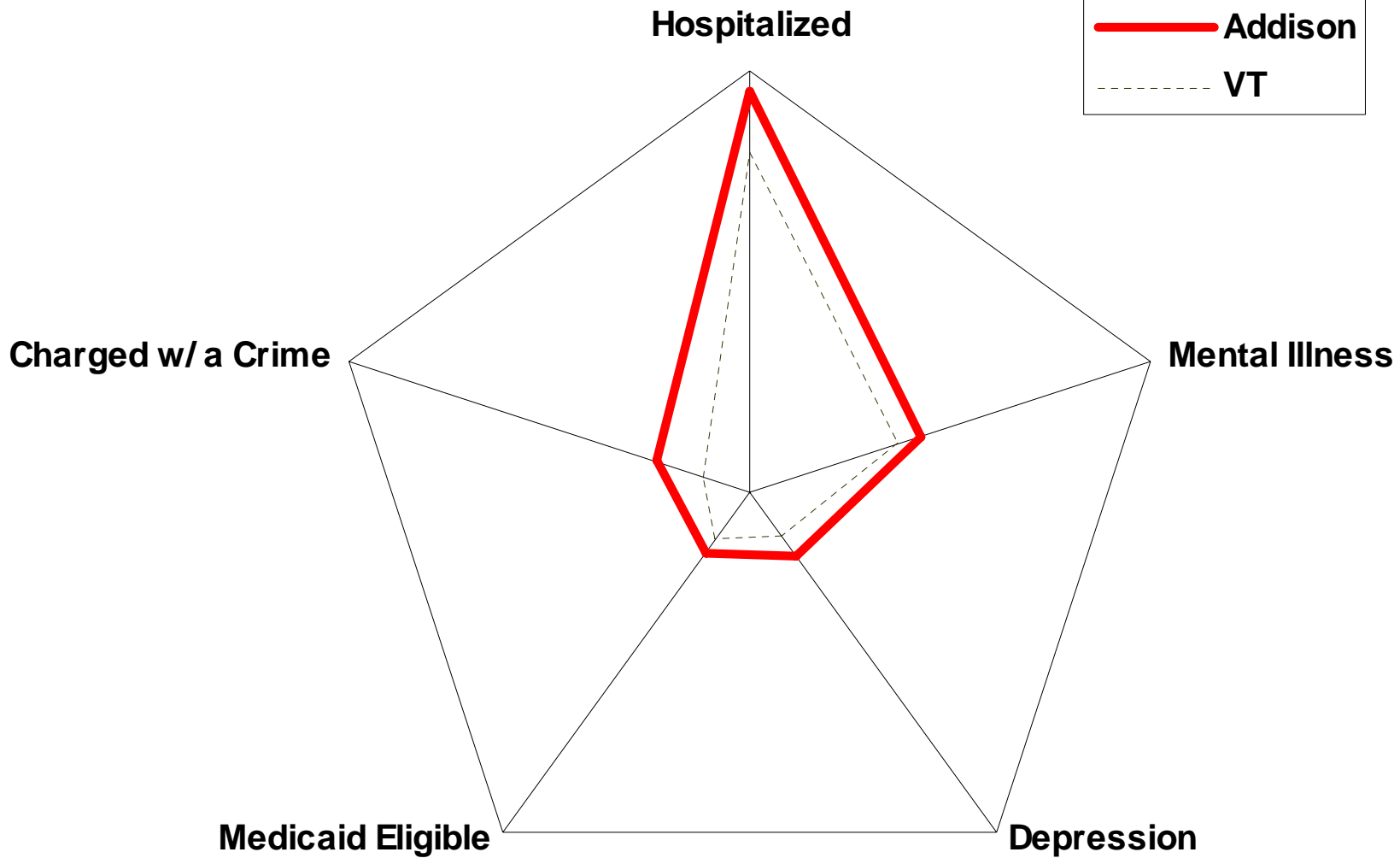
Charged w/ a Crime

Mental Illness

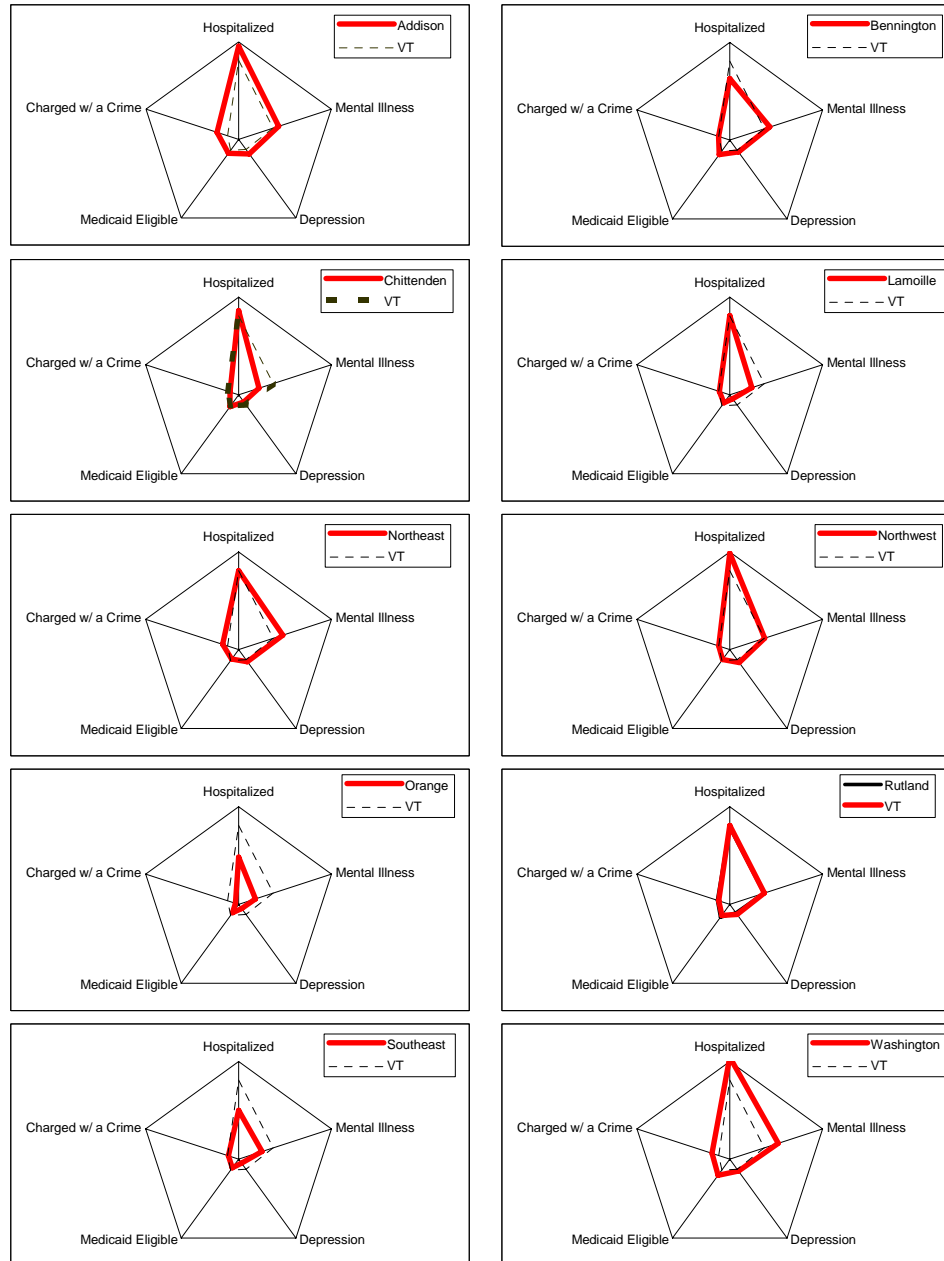
Medicaid Eligible

Depression



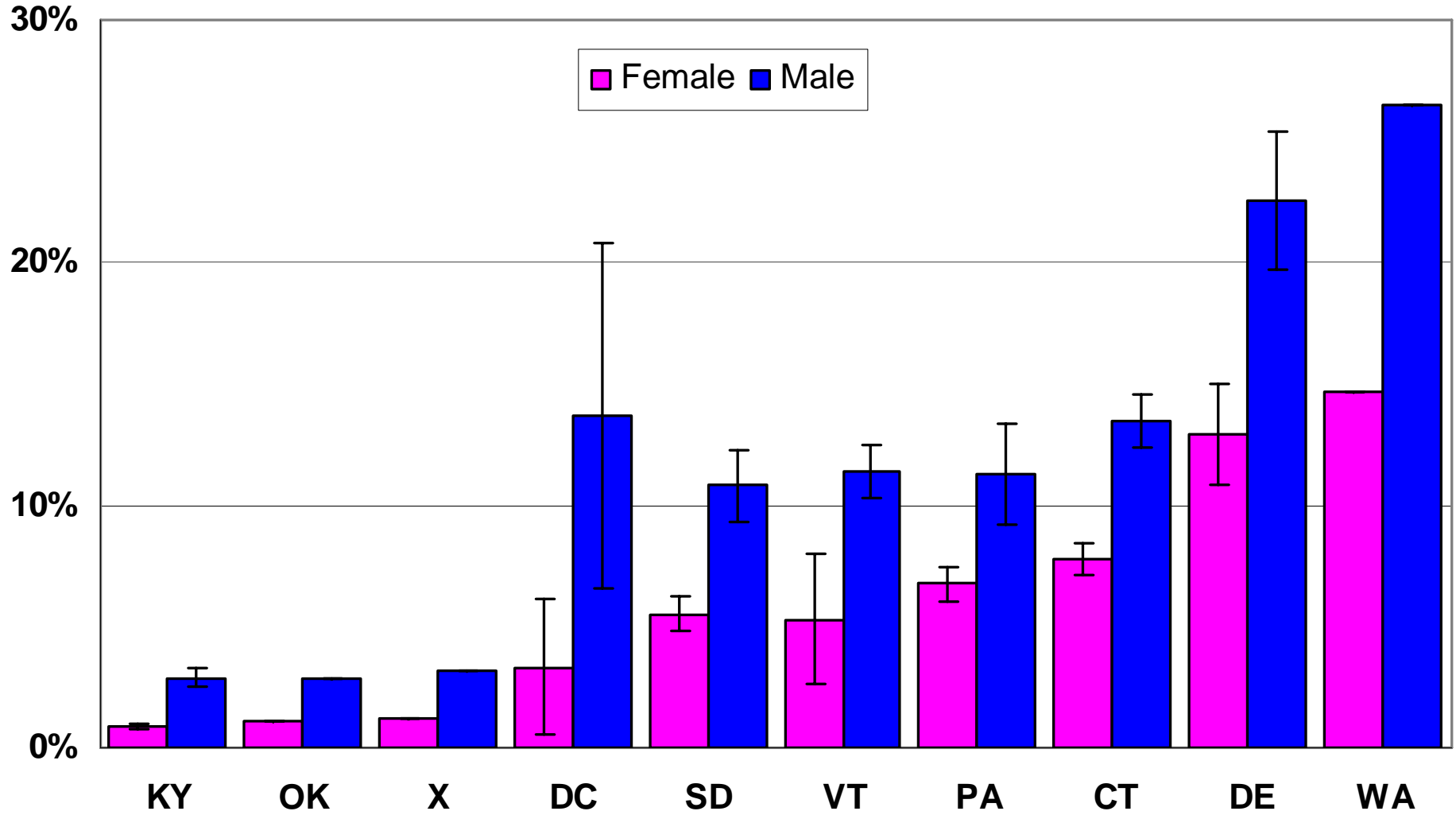


ACCESS TO ADULT MENTAL HEALTH SERVICES UTILIZATION RATES FOR SPECIAL POPULATIONS BY REGION, VERMONT: FY 1999

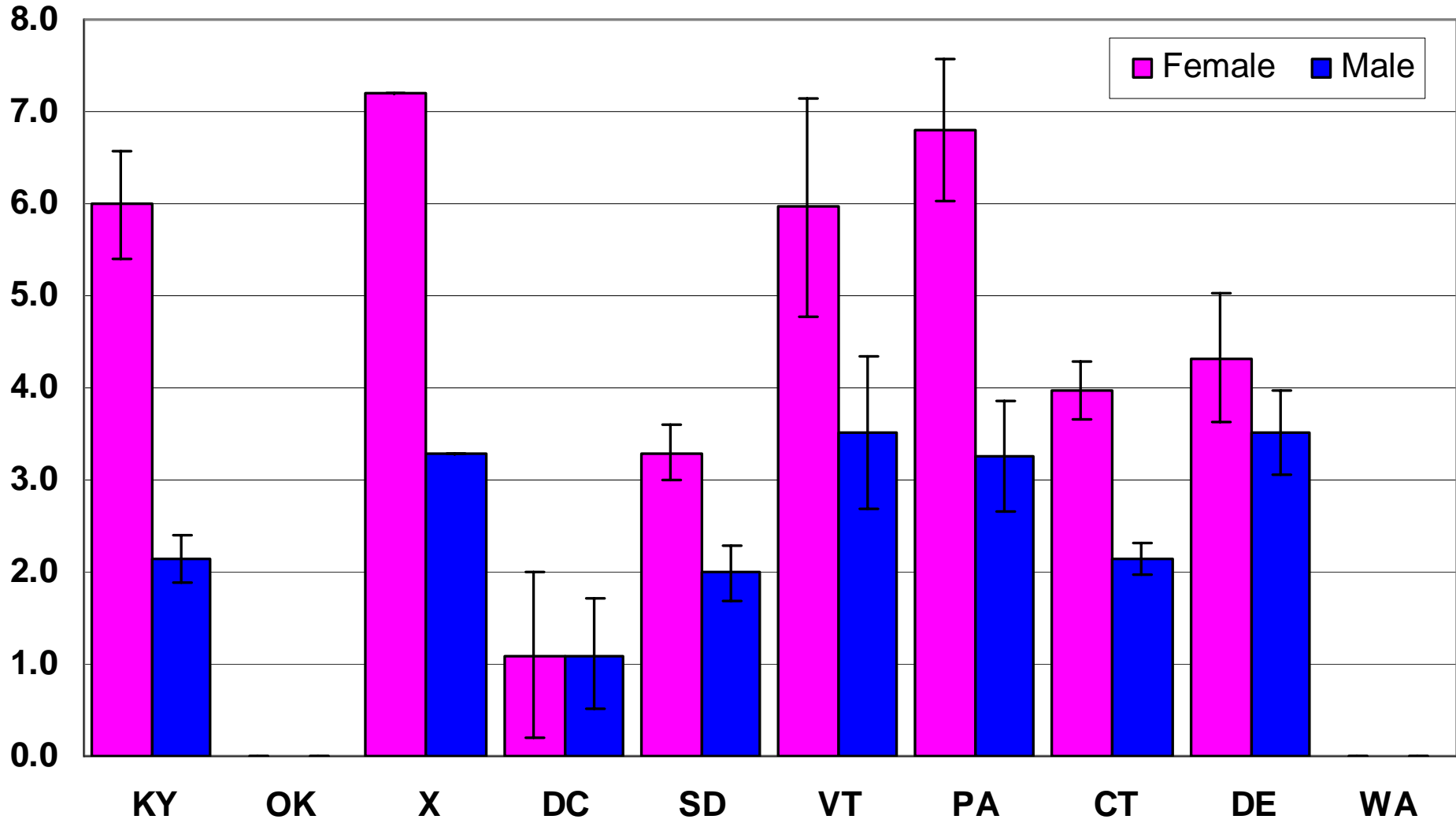


Each axis represents the per capita utilization rate for the specified group based on a scale of 0 - 50%. The intersection of the axis is 0.

Rate of Mental Health Criminal Justice Involvement



Relative Risk of Criminal Justice Involvement



Data Are Everywhere

Use the Data

Incrementalism

Perspectivistic

Data

Mental Health

Date of Birth and Gender
State and County Code
Diagnosis

Criminal Justice

Date of Birth and Gender
State and County Code
Type of Crime

How do they do that?

PROBABILISTIC

POPULATION

ESTIMATION

$$P_j(l_j) = \sum_{i=1}^{l_j} \frac{365}{365 - i}$$

Probabilistic Population Estimates

for Specified Numbers of Birth Dates Within a Given Year

Birth Dates

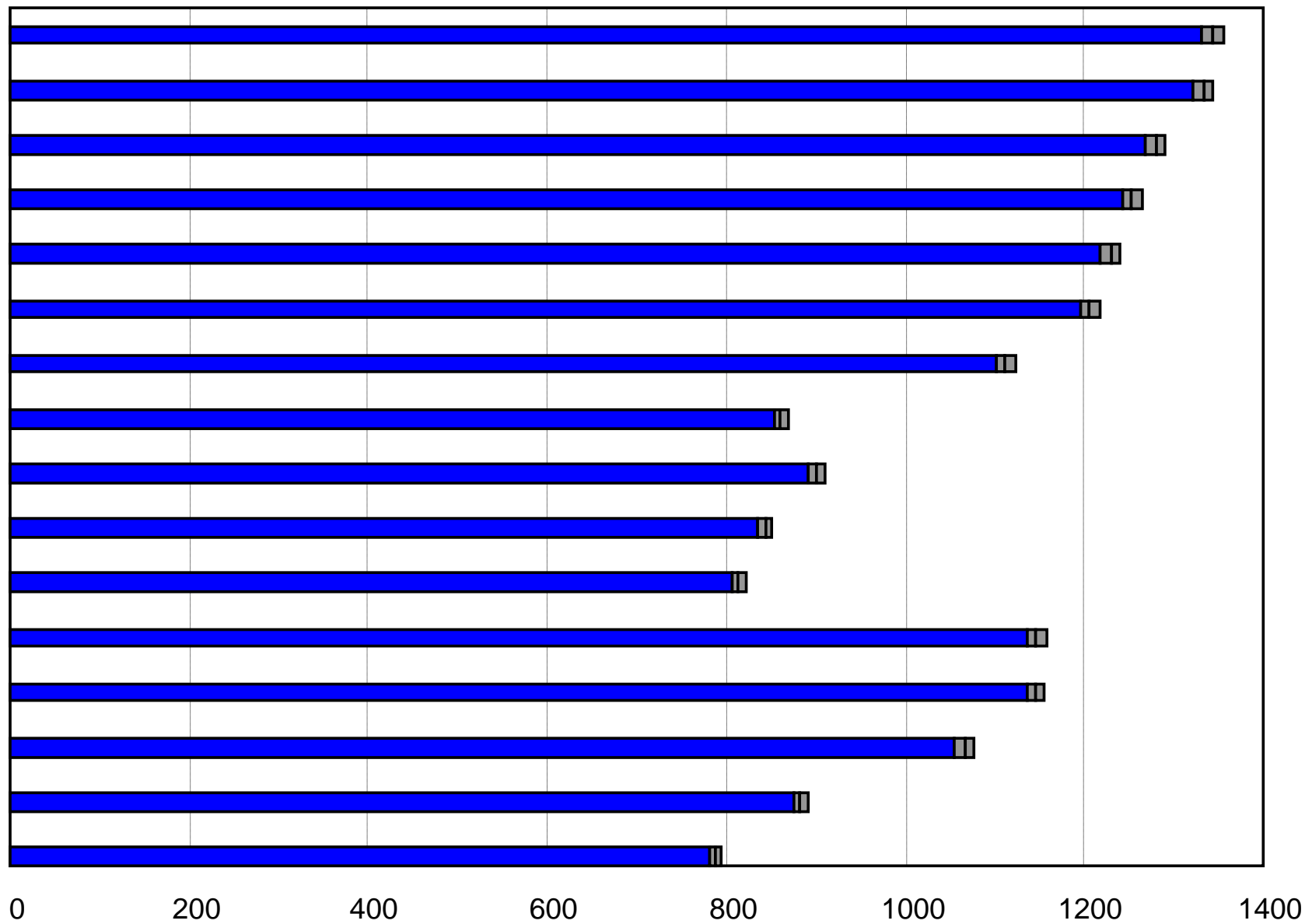
Number of People

| | | | |
|-----|-------|---|------|
| 1 | 1.003 | ± | .103 |
| 10 | 10.15 | ± | .776 |
| 100 | 117 | ± | 9 |
| 200 | 290 | ± | 22 |
| 300 | 632 | ± | 64 |
| 350 | 1177 | ± | 171 |
| 360 | 1603 | ± | 325 |

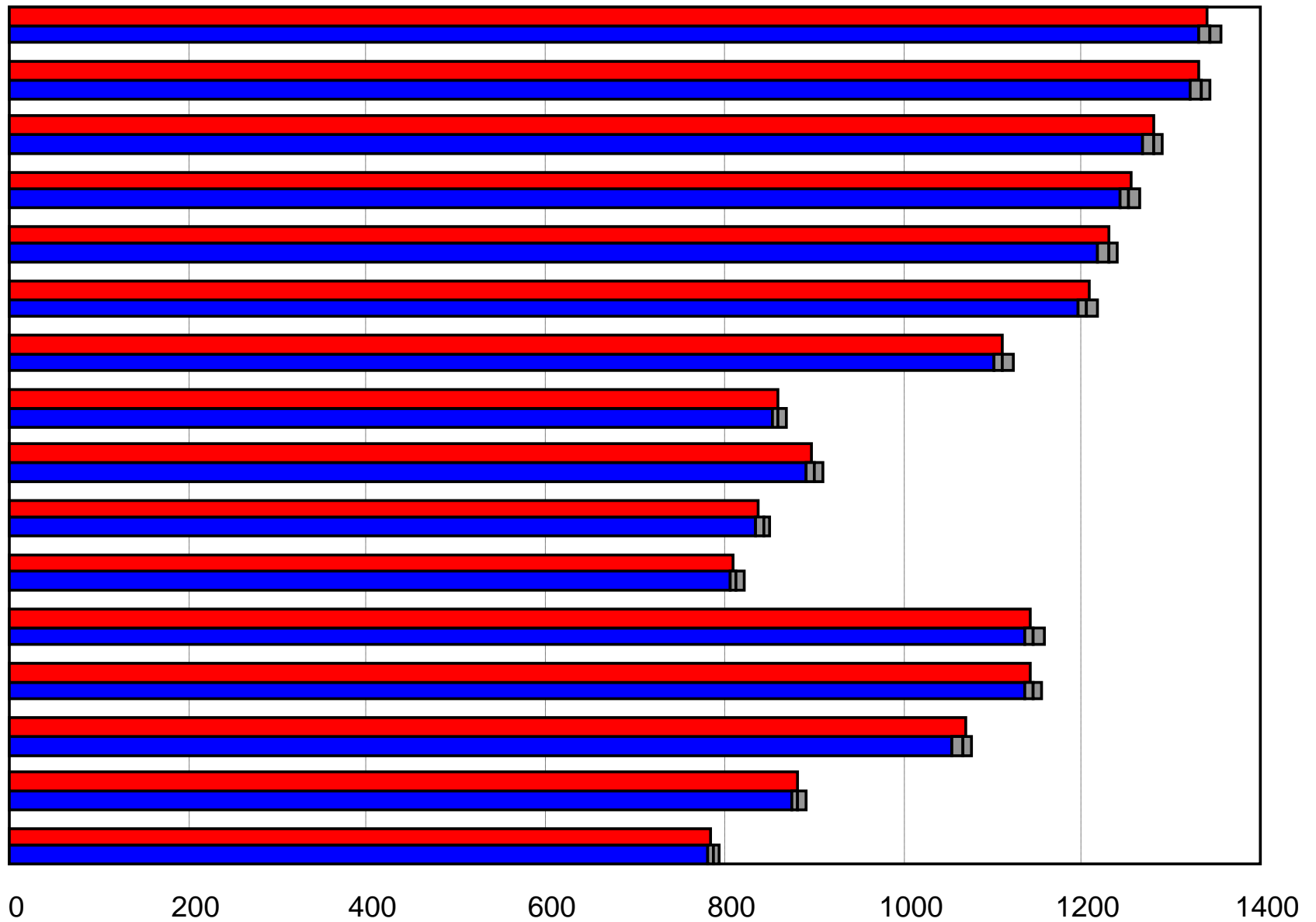
VERIFICATION

CASELOAD SIZE

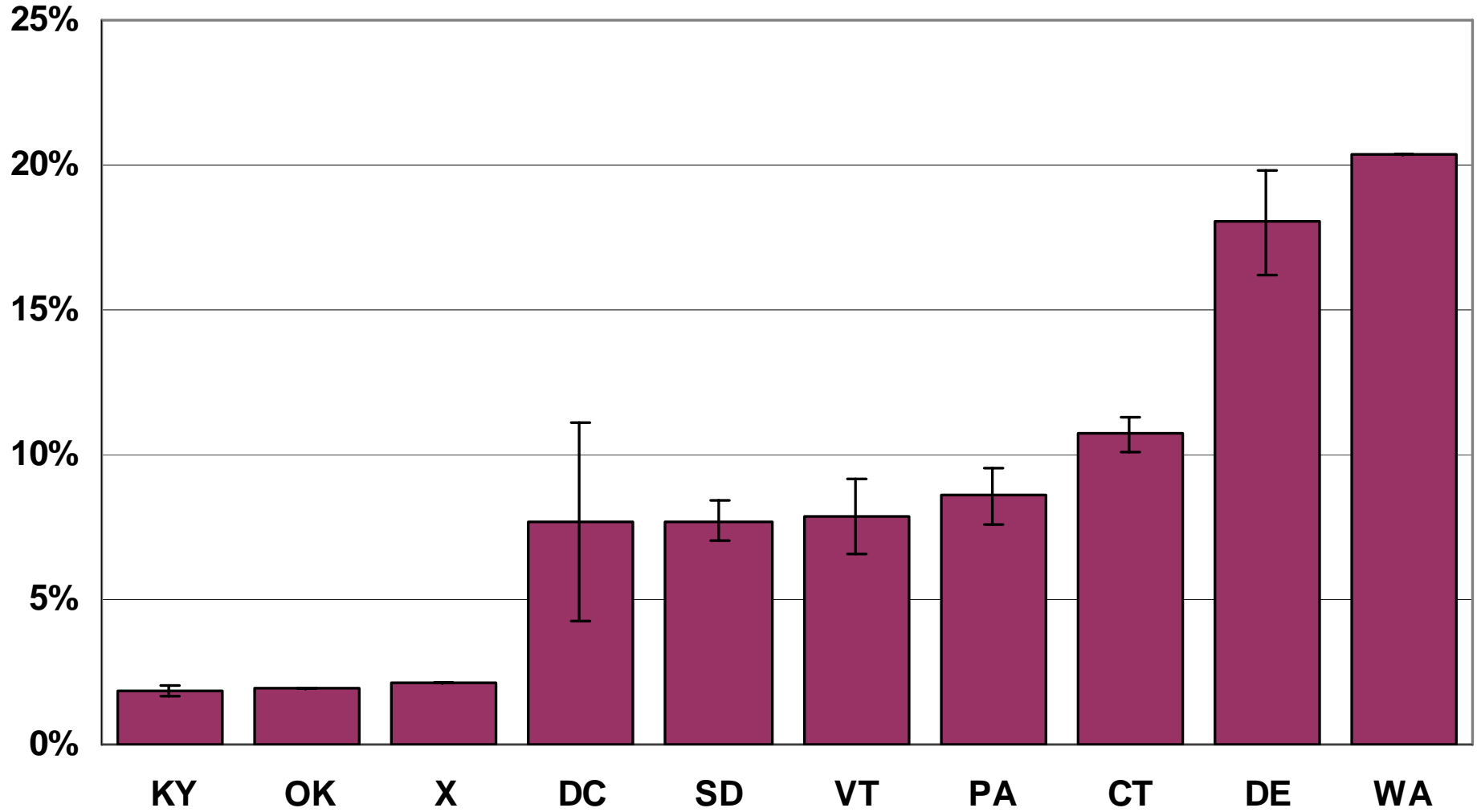
Estimated and Actual Number of CRT Clients



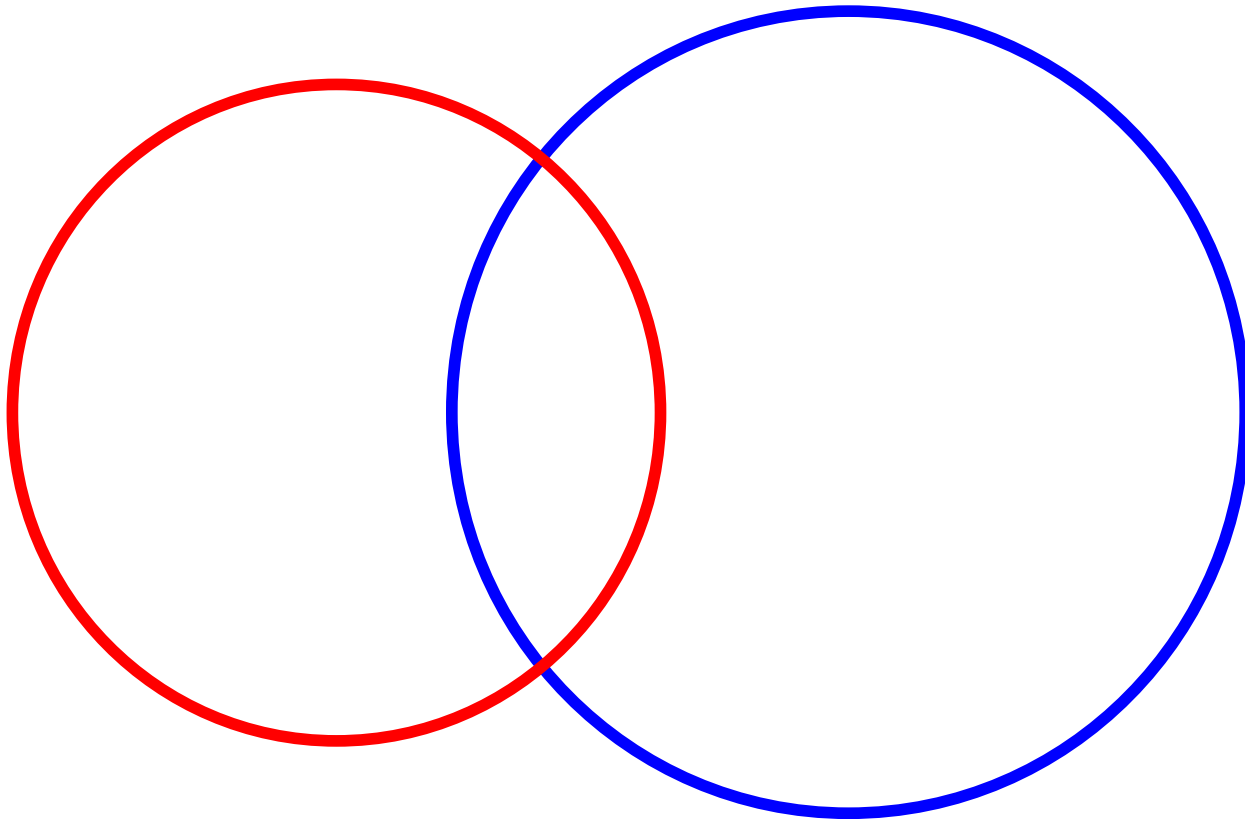
Estimated and Actual Number of CRT Clients



Rate of Mental Health Criminal Justice Involvement



Caseload Overlap

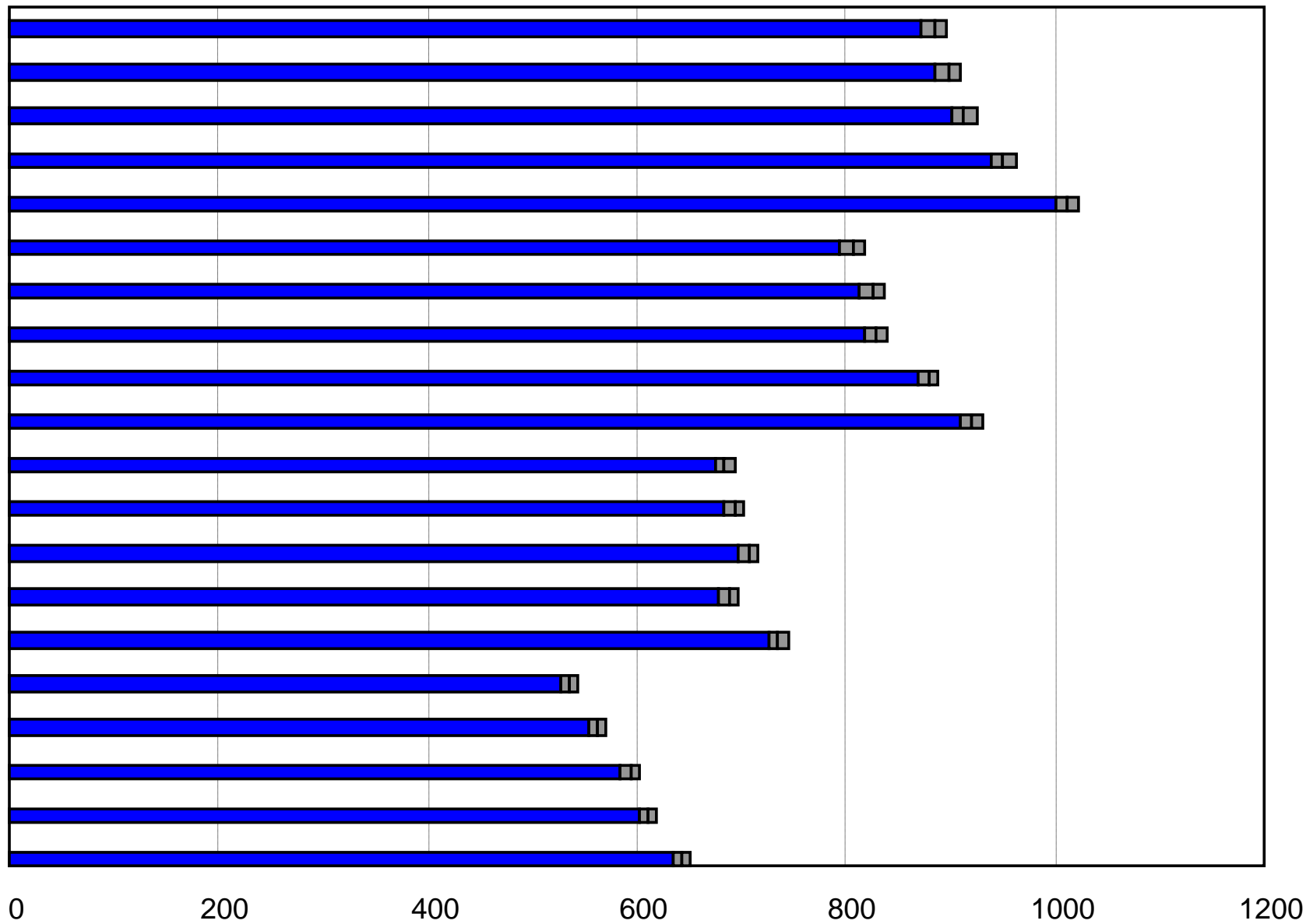


$$(A \cap B) = A + B - (A \cup B)$$

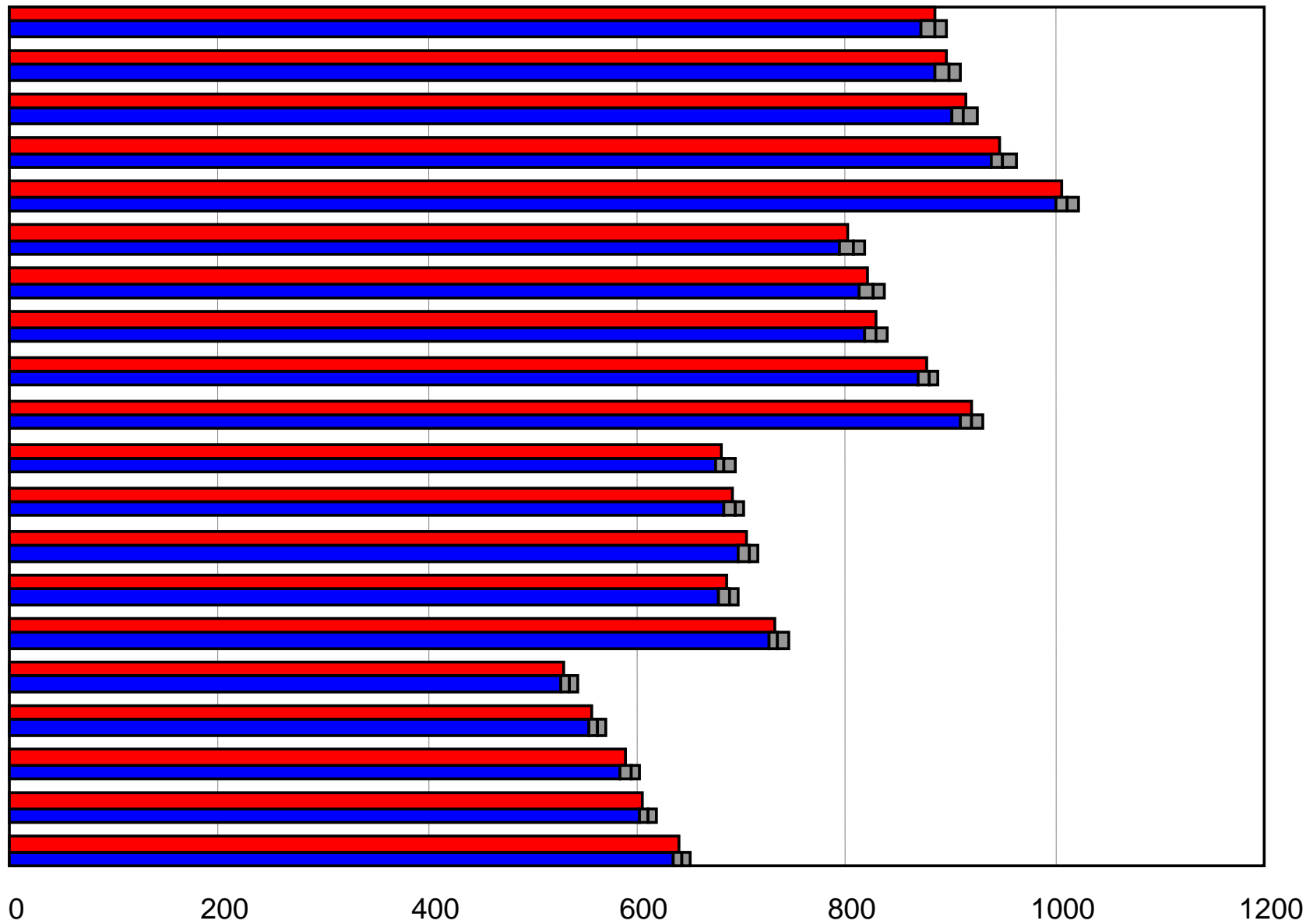
VERIFICATION

CASELOAD OVERLAP

Estimated and Actual Number of CRT Clients



Estimated and Actual Number of CRT Clients

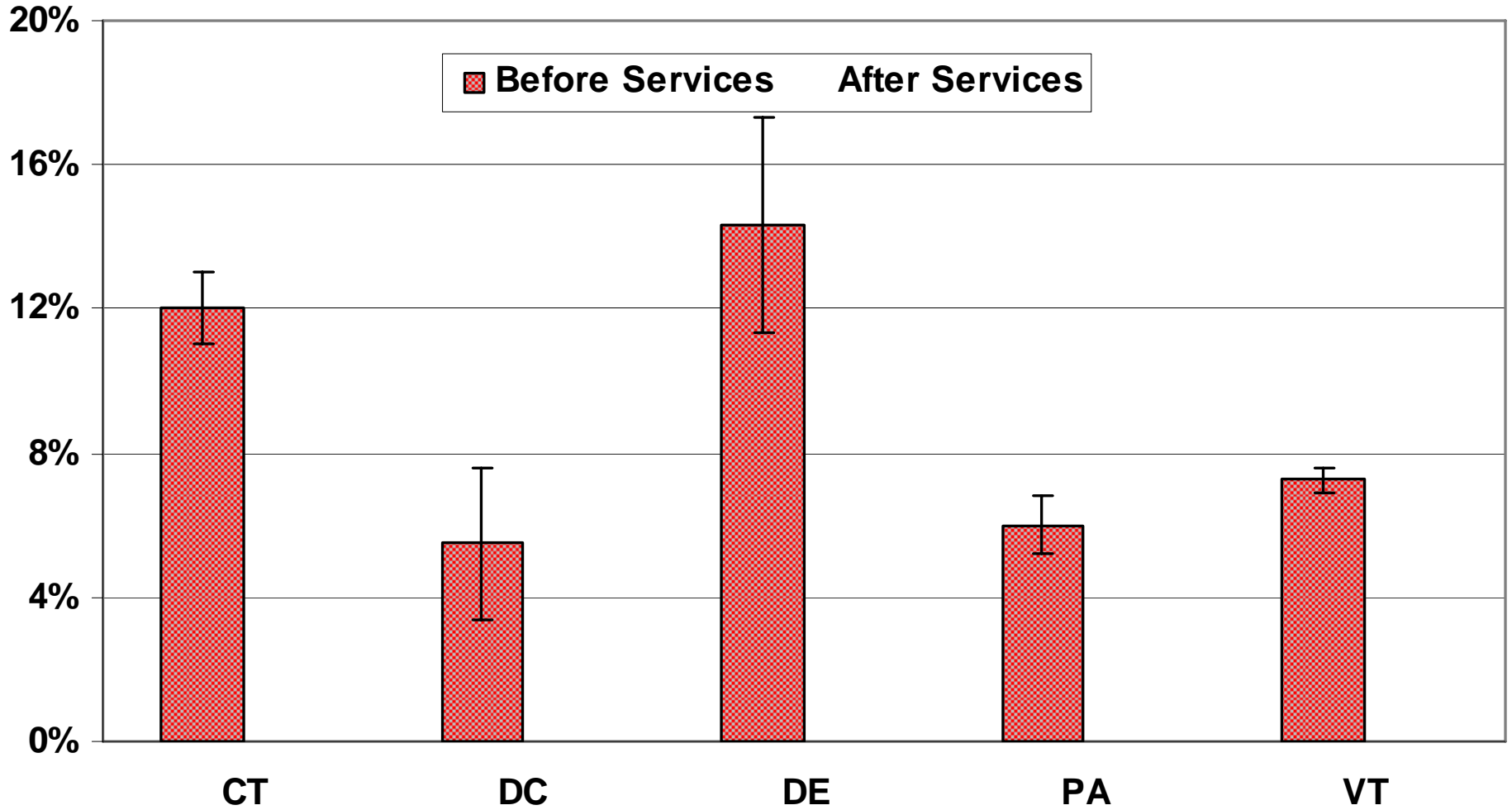


Administrative Data Advantages

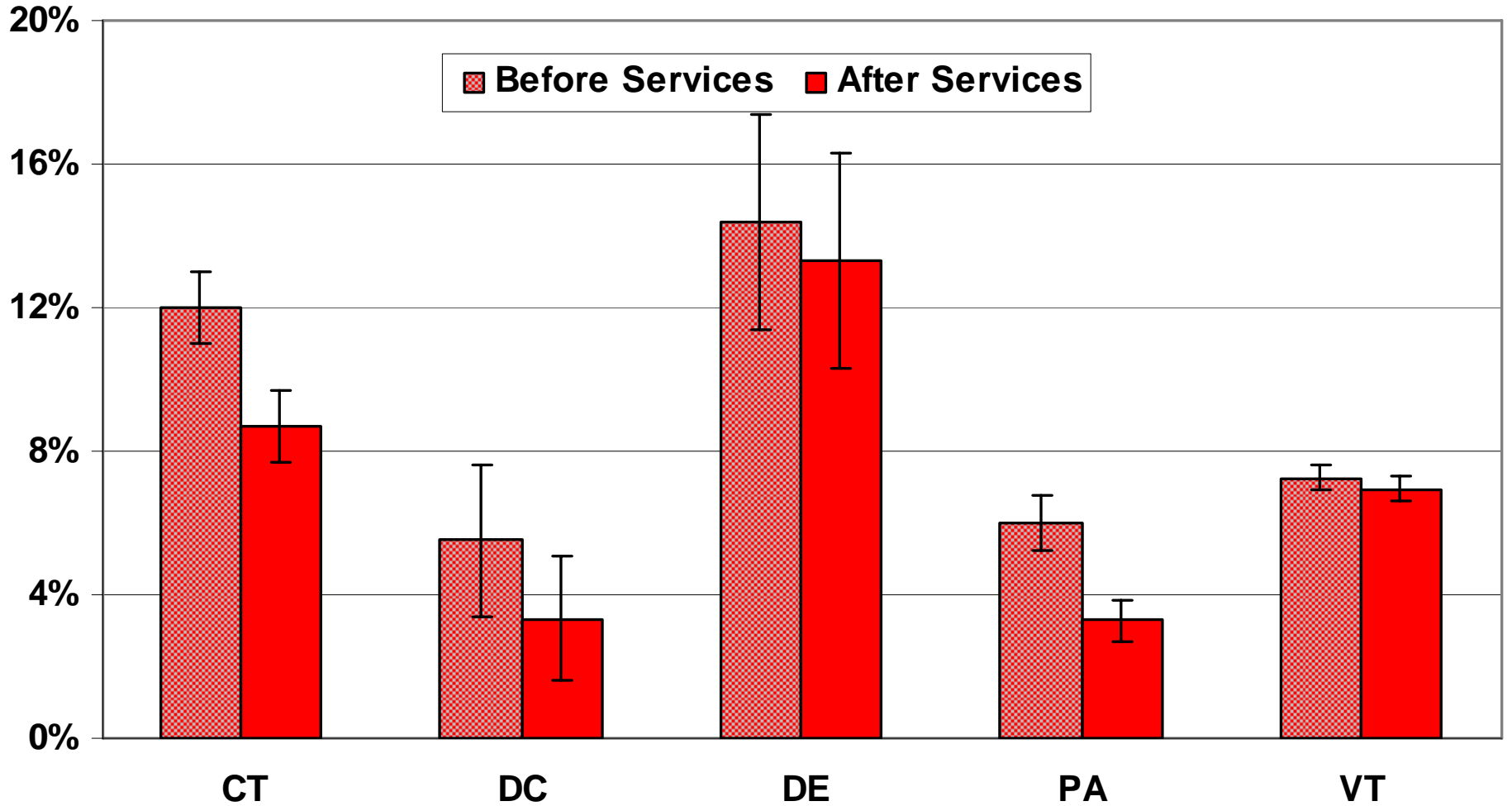
**Comprehensive
Real World Practice
Data Quality Controls
Cost Avoidance**

**Change
in
Criminal Justice Involvement**

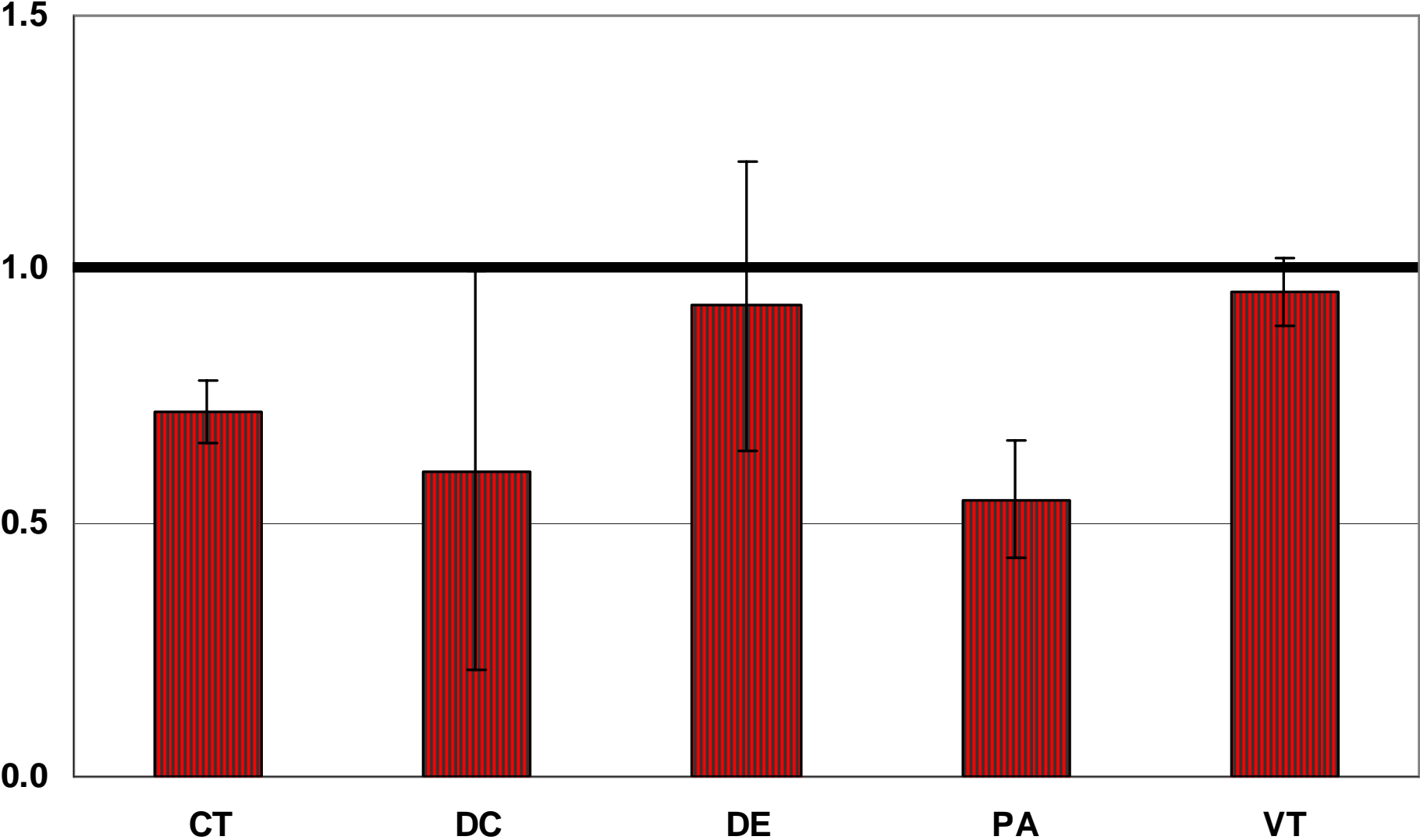
Criminal Justice Involvement Before and After Mental Health Services



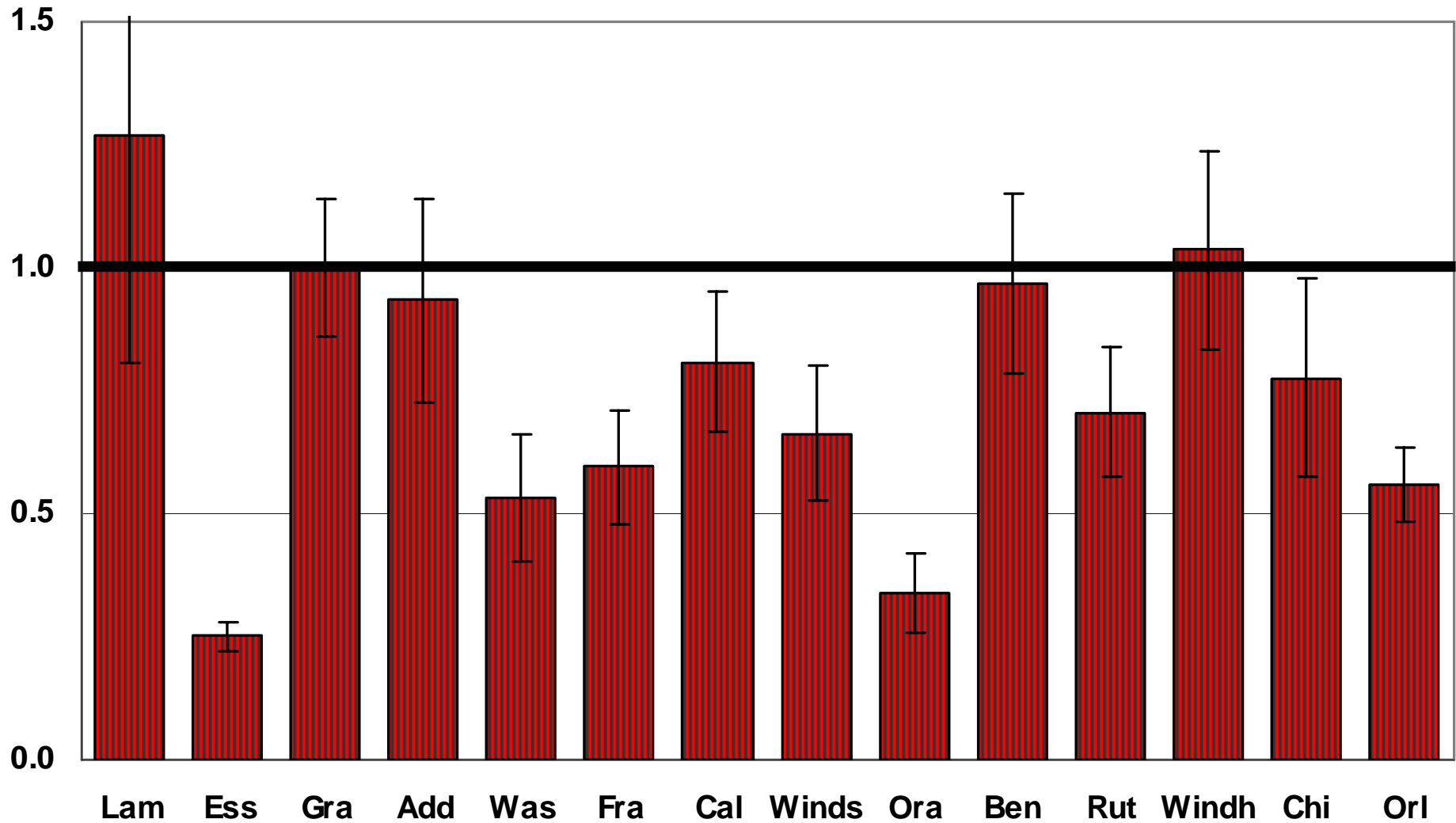
Criminal Justice Involvement Before and After Mental Health Services



Relative Rate of Criminal Justice Involvement



Relative Risk of Criminal Justice Involvement in Vermont Counties (Post ÷ Pre SA Services)



Data

Mental Health/Substance Abuse

Date of Birth and Gender
State and County Code
Diagnosis

Criminal Justice

Date of Birth and Gender
State and County Code
Type of Crime

Housing

Utilization of Section 8 Housing

“Increased Stability in Housing”

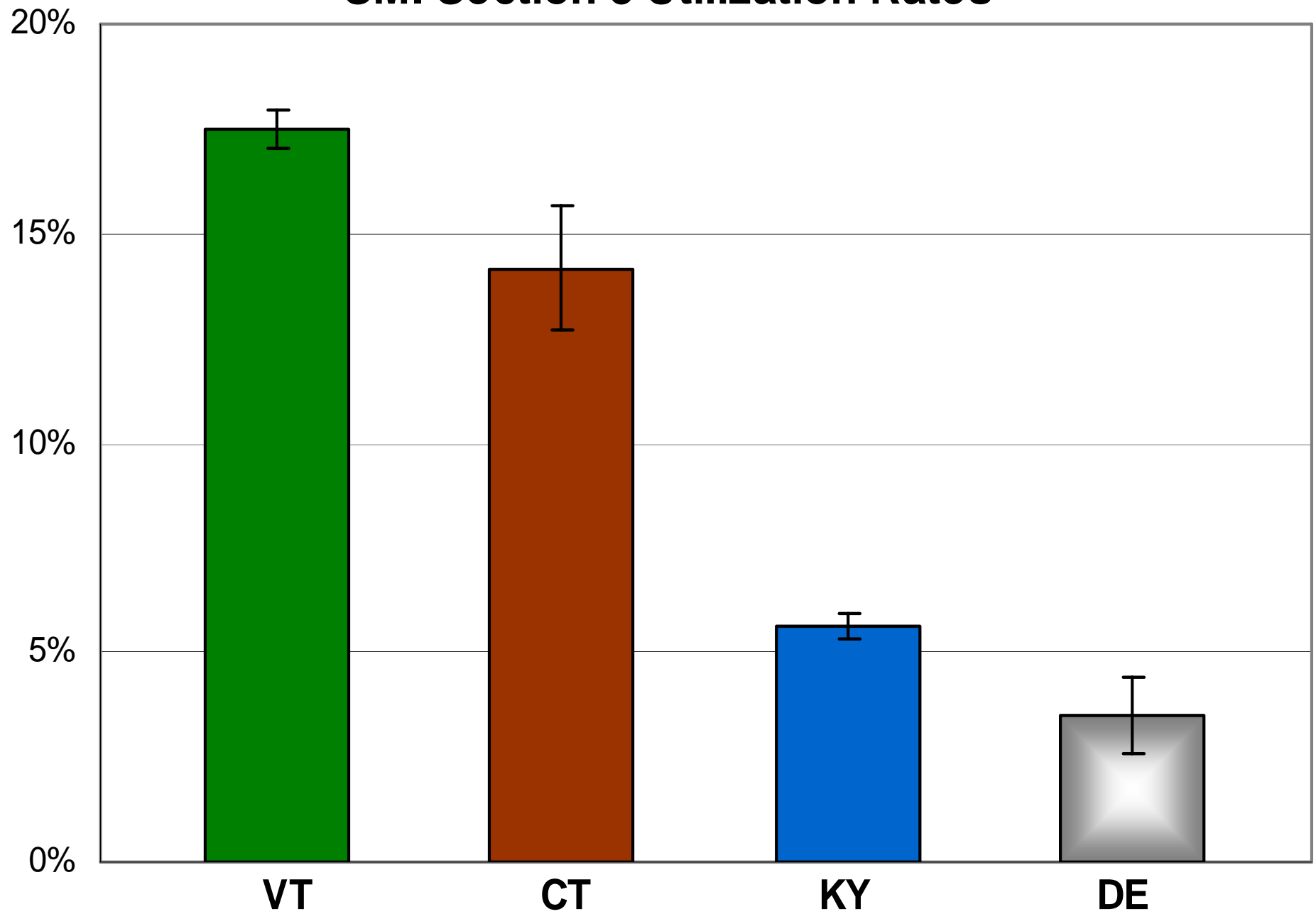
Section 8 Housing

Housing Choice Voucher

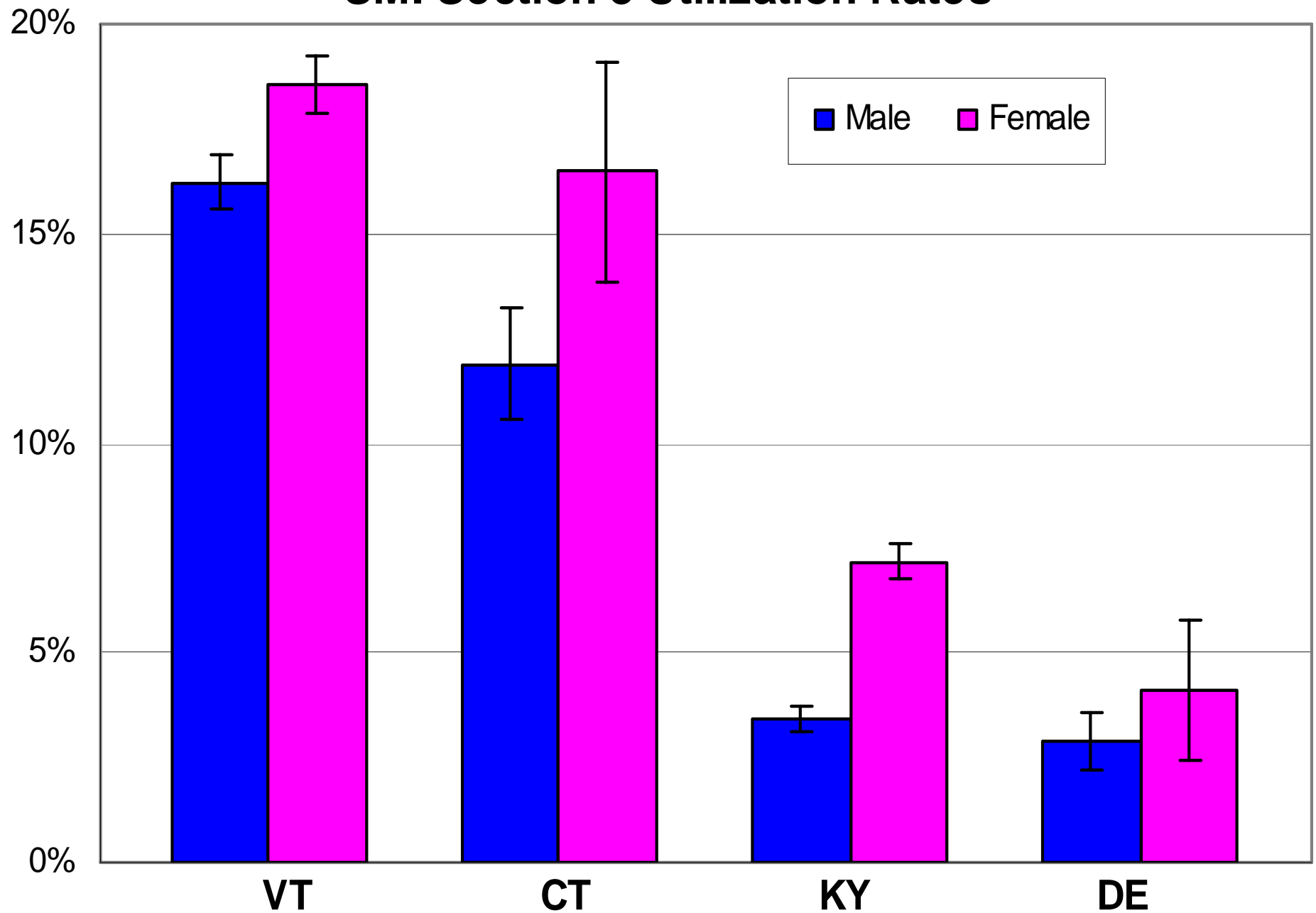
Low Income, Elderly, Disabled

Federal \$\$ to Local Organizations

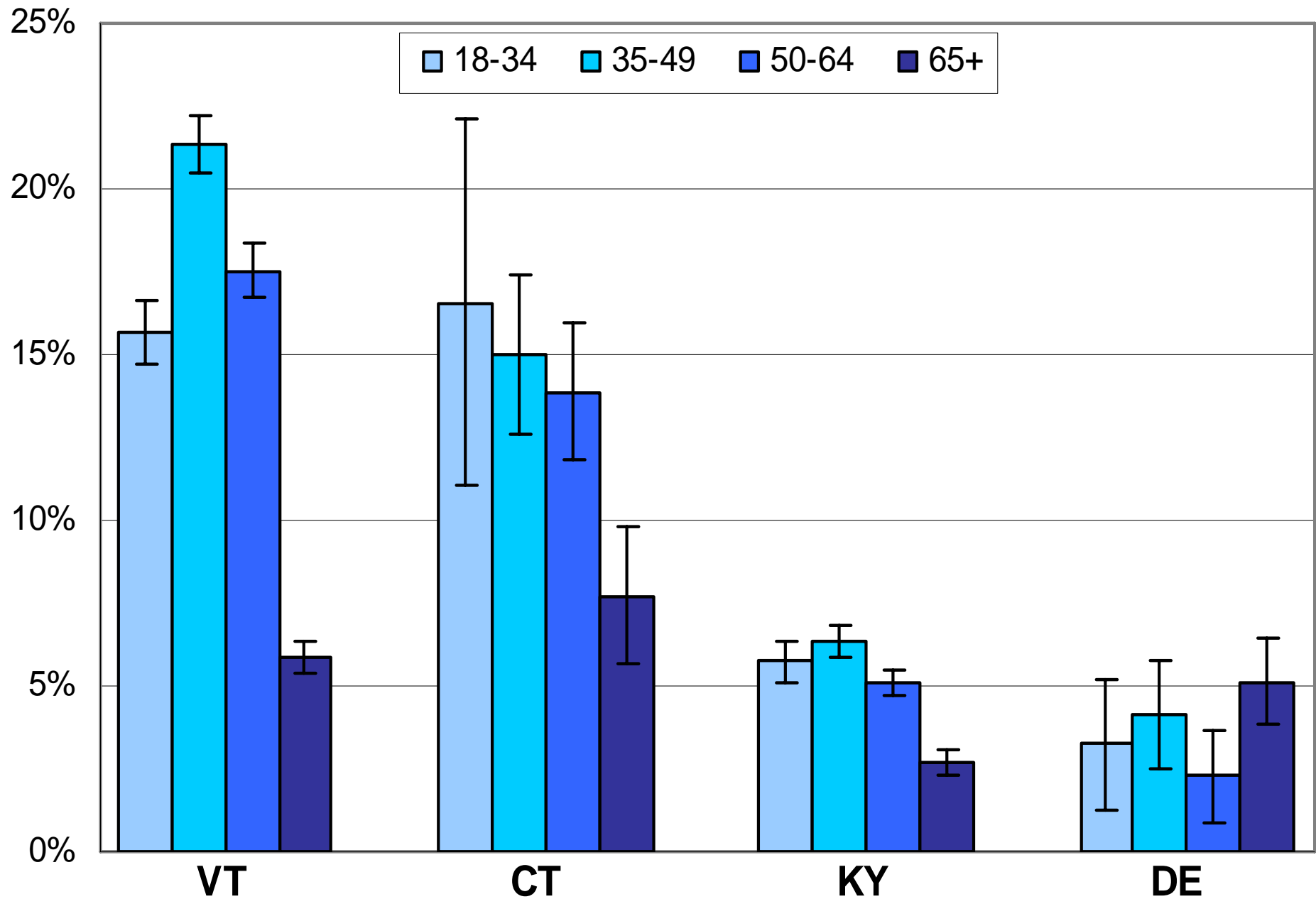
SMI Section 8 Utilization Rates

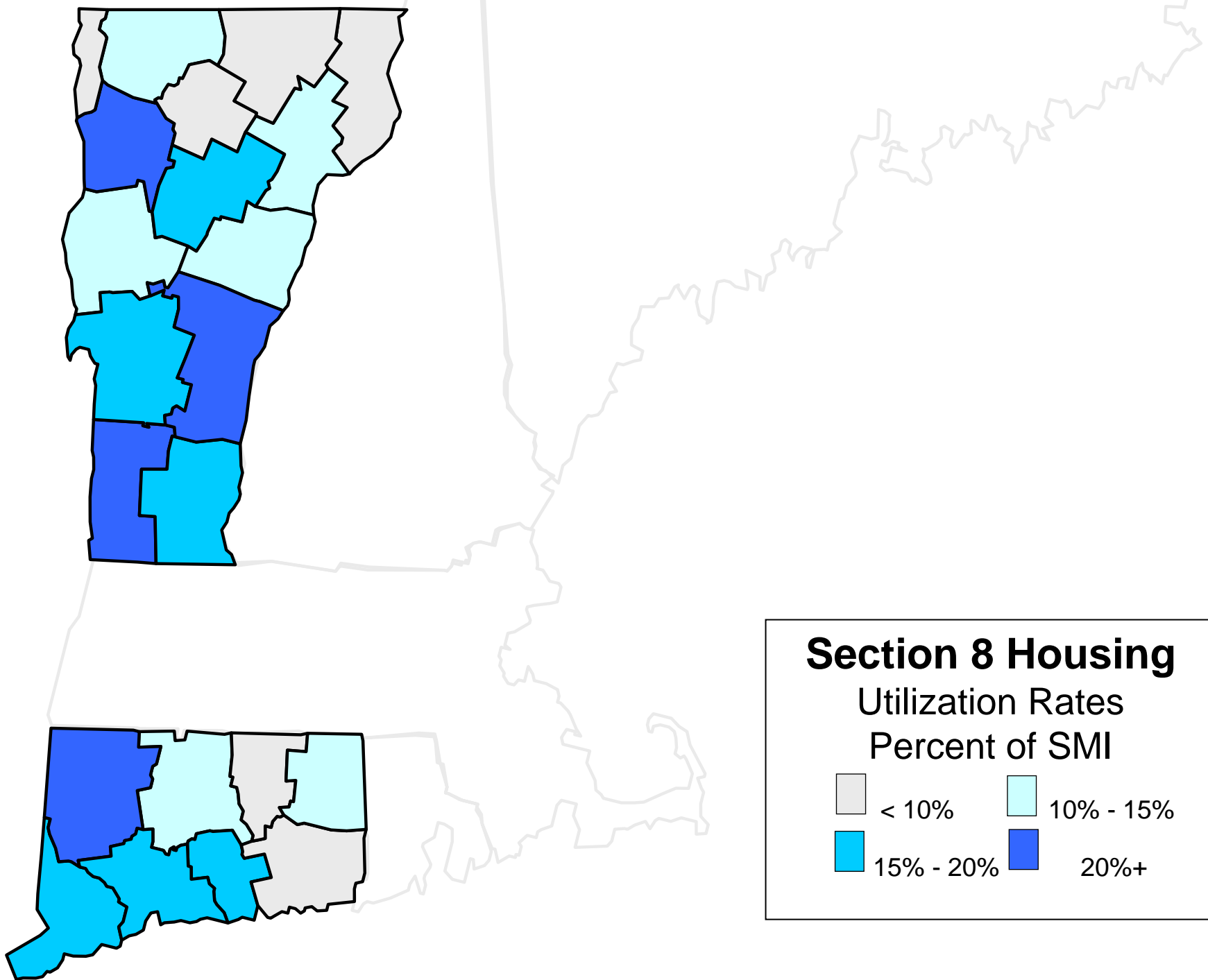


SMI Section 8 Utilization Rates



SMI Section 8 Utilization Rates



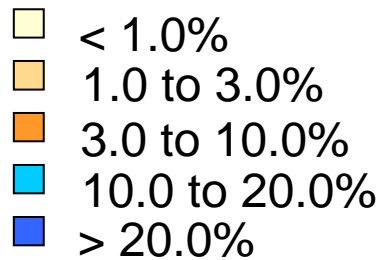
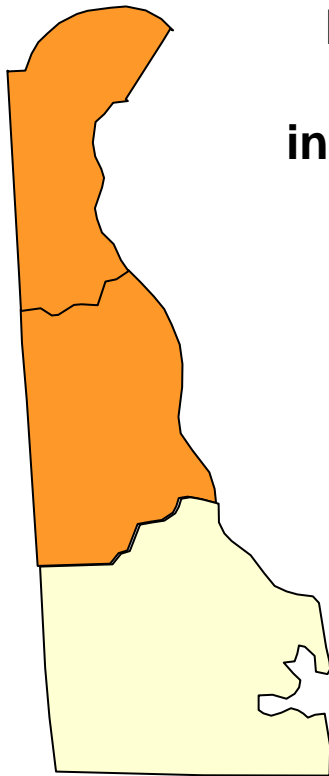


Section 8 Housing Utilization Rates Percent of SMI

- < 10%
- 10% - 15%
- 15% - 20%
- 20%+

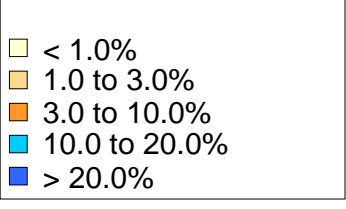
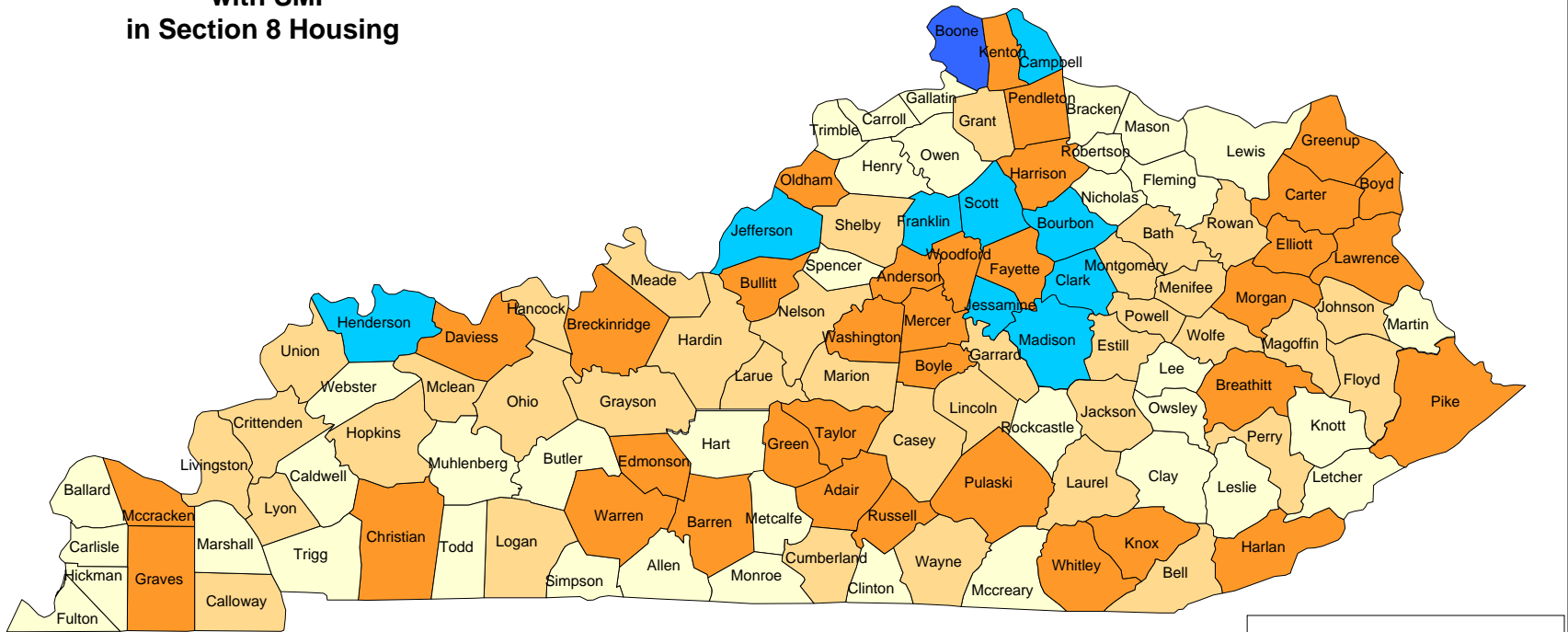
DELAWARE

**Percent of Adults
served by CMHC
in Section 8 Housing**



KENTUCKY

Percent of Adults with SMI in Section 8 Housing



Data

Mental Health

Full Date of Birth and Gender
State and County Code
Diagnosis

Section 8

Date of Birth and Gender
State and County Code

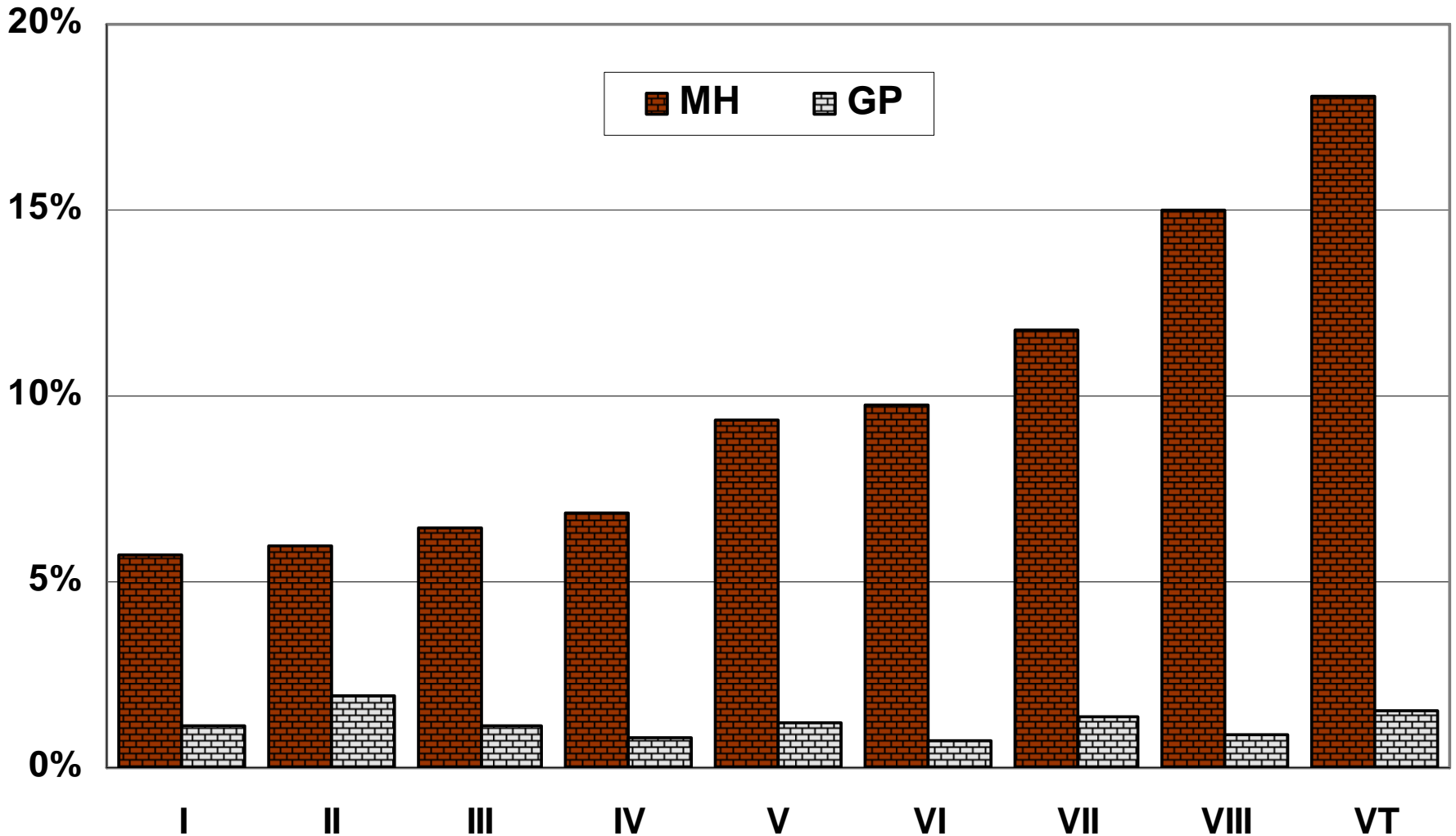
Section 8 Housing

State Hospital Discharges

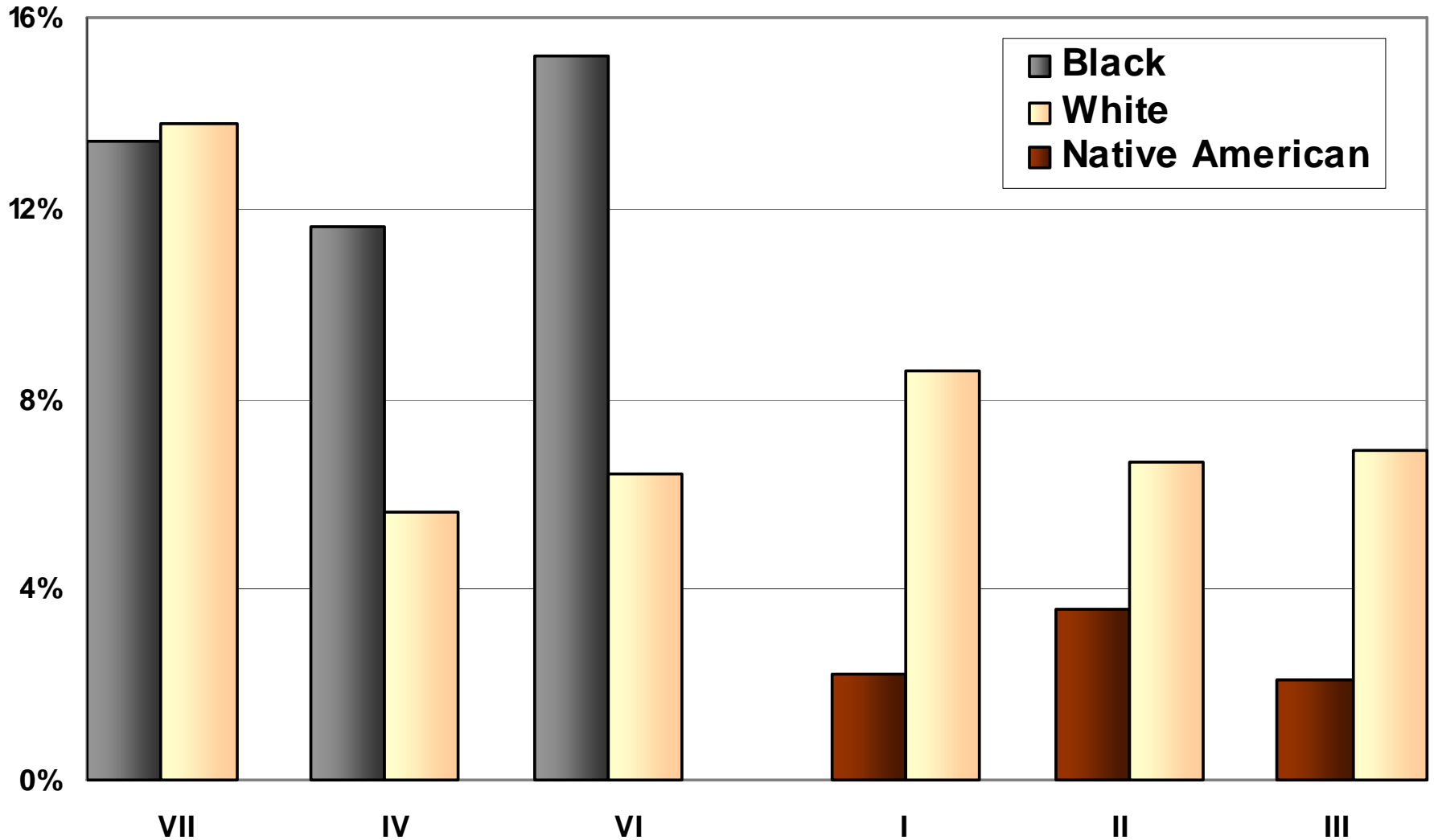
In Nine States

Section 8 Utilization Rates

State Hospital Discharges & General Population



Section 8 Utilization Rates in 6 States After State Hospital Discharge

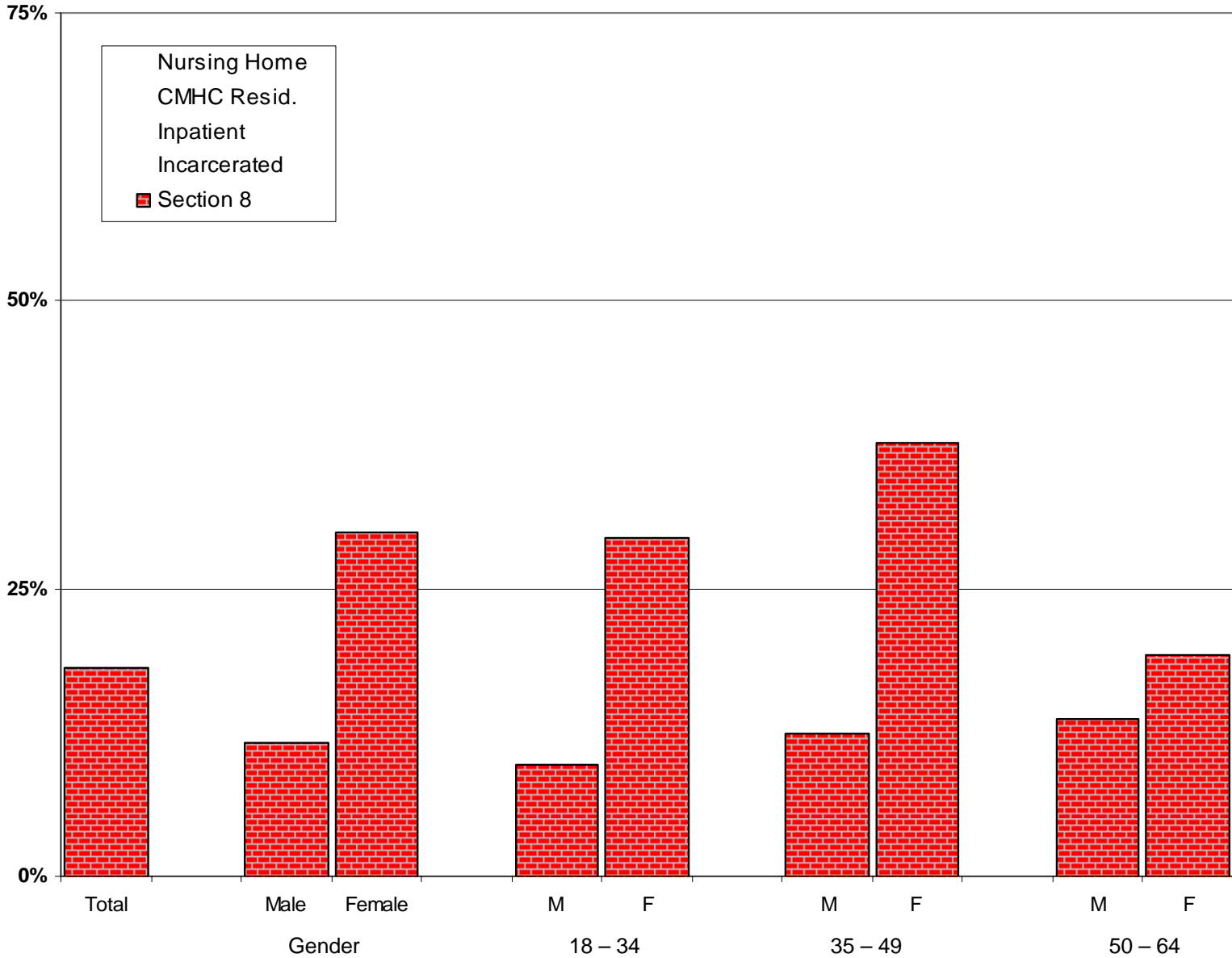


Other Residential Situations

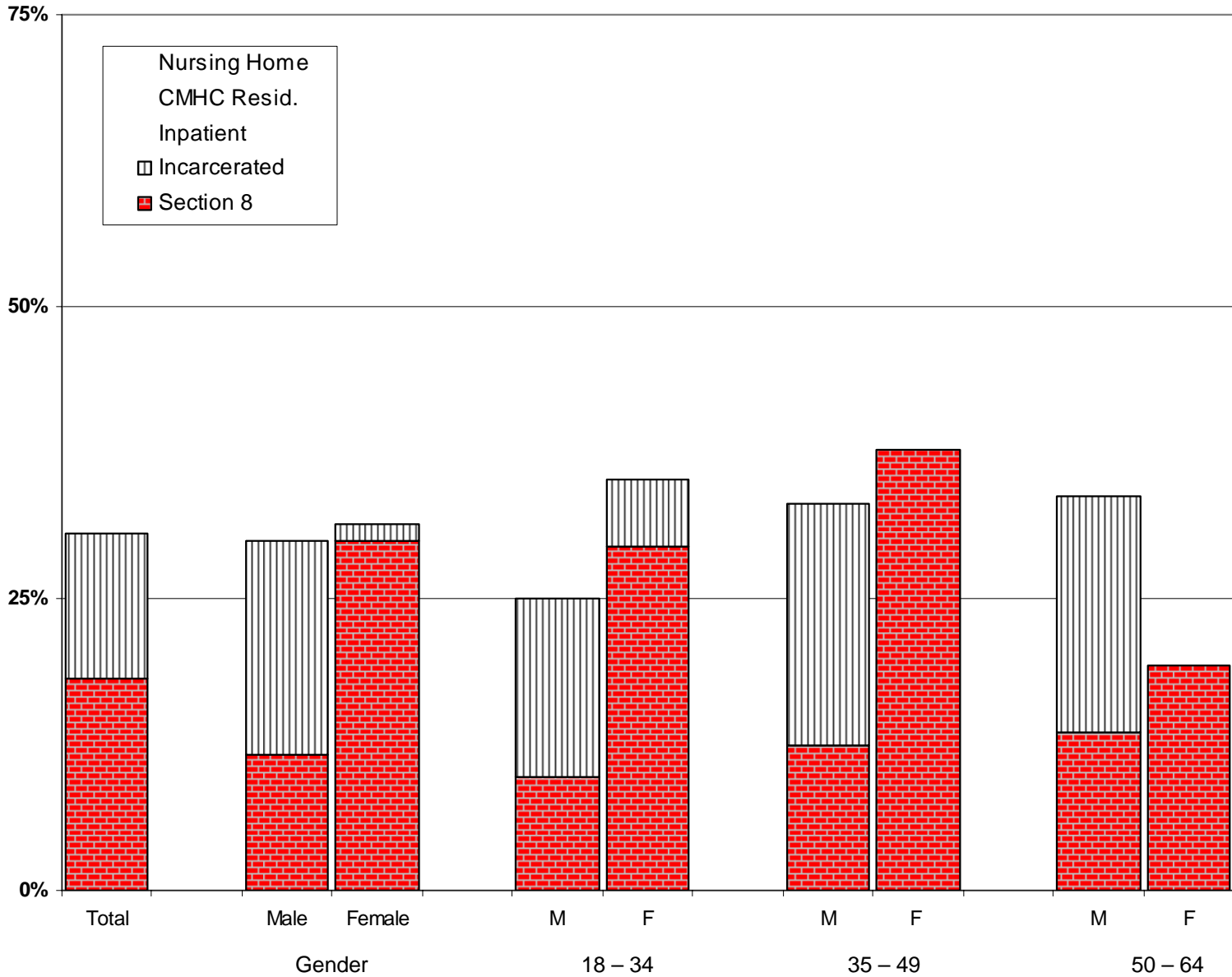
Former State Hospital Patients
In Vermont

Discharged during CY2004
Residence in May 2005

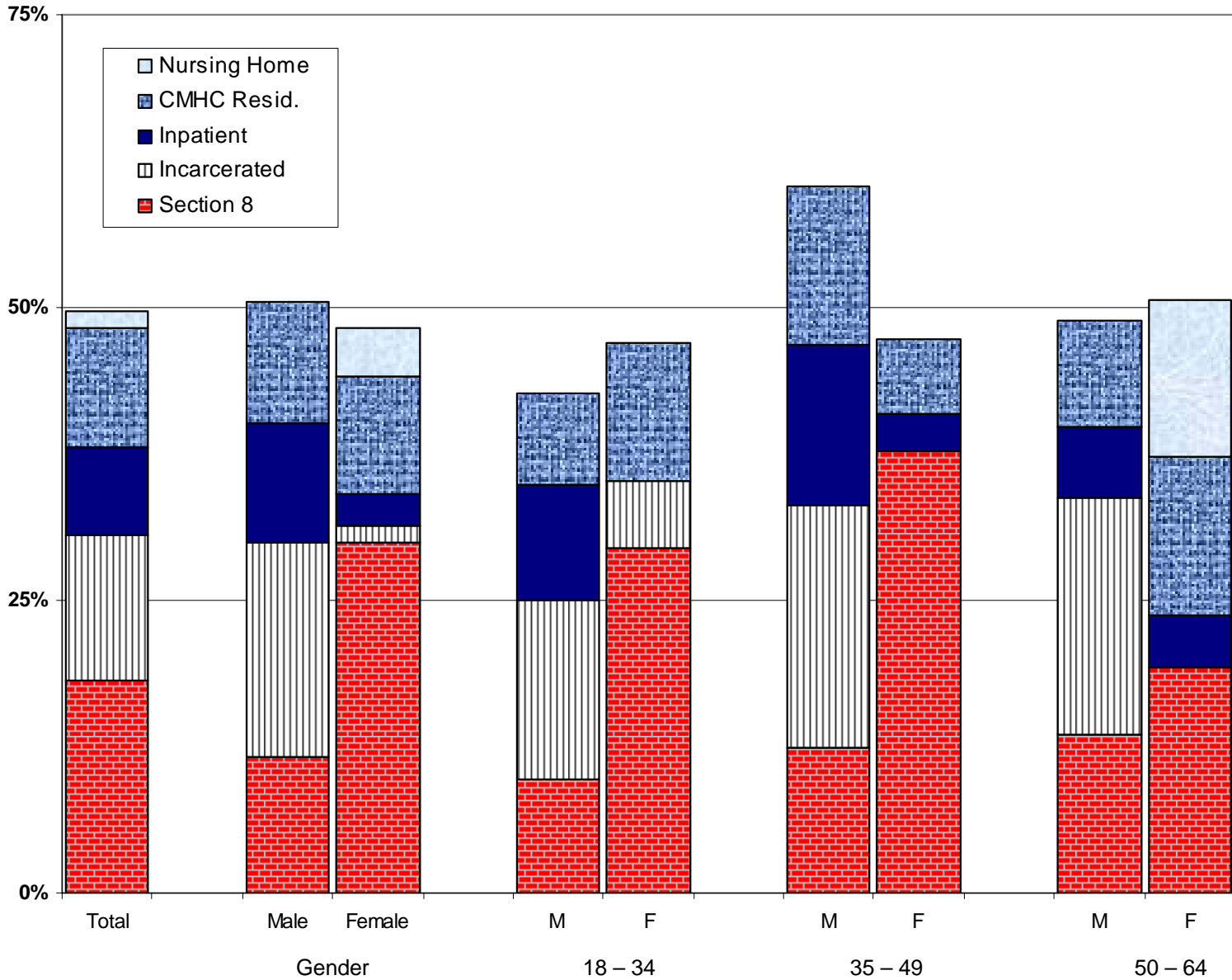
Residential Situation for Individuals Discharged from VSH



Residential Situation for Individuals Discharged from VSH



Residential Situation for Individuals Discharged from VSH

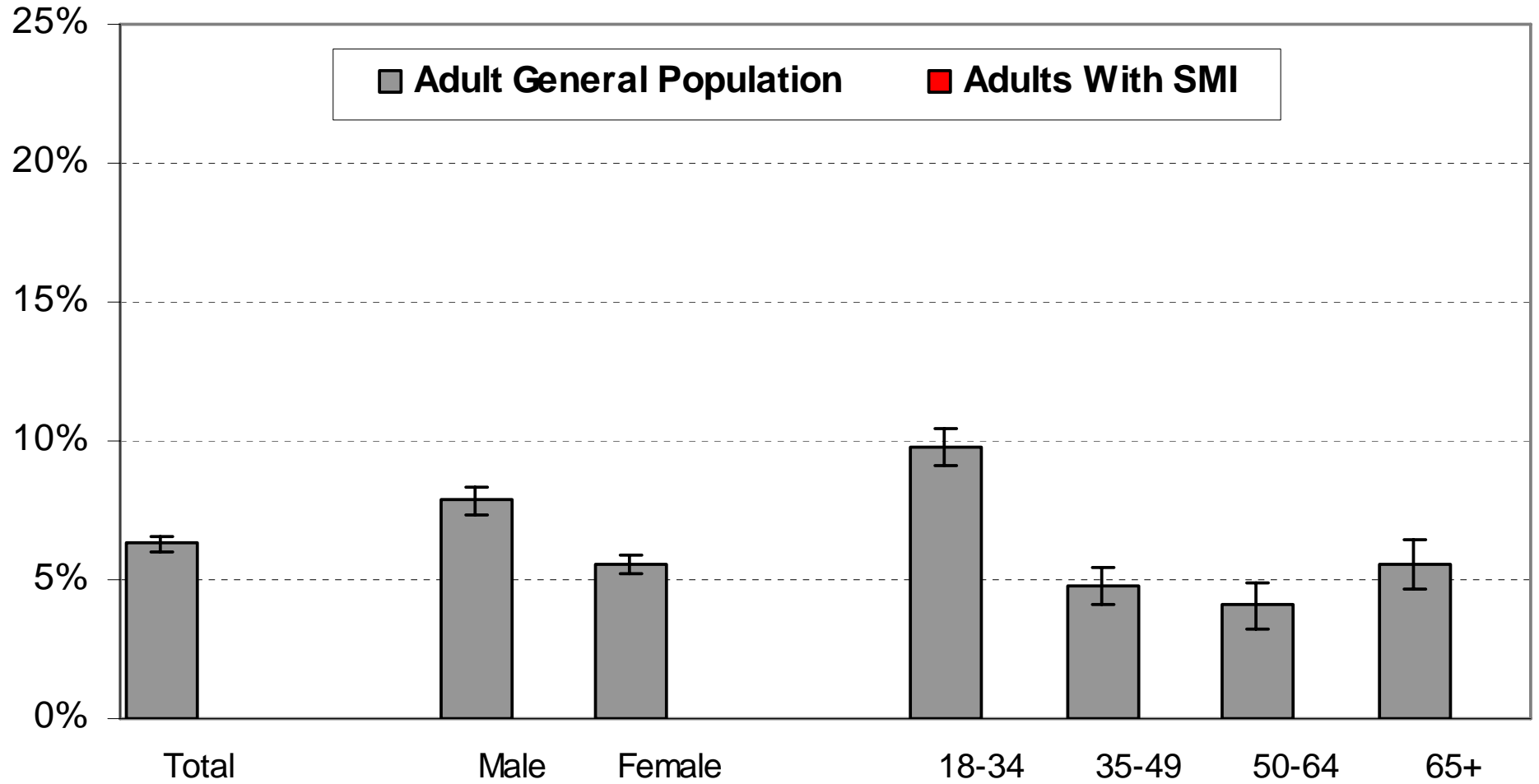


Ending Participation in Section 8

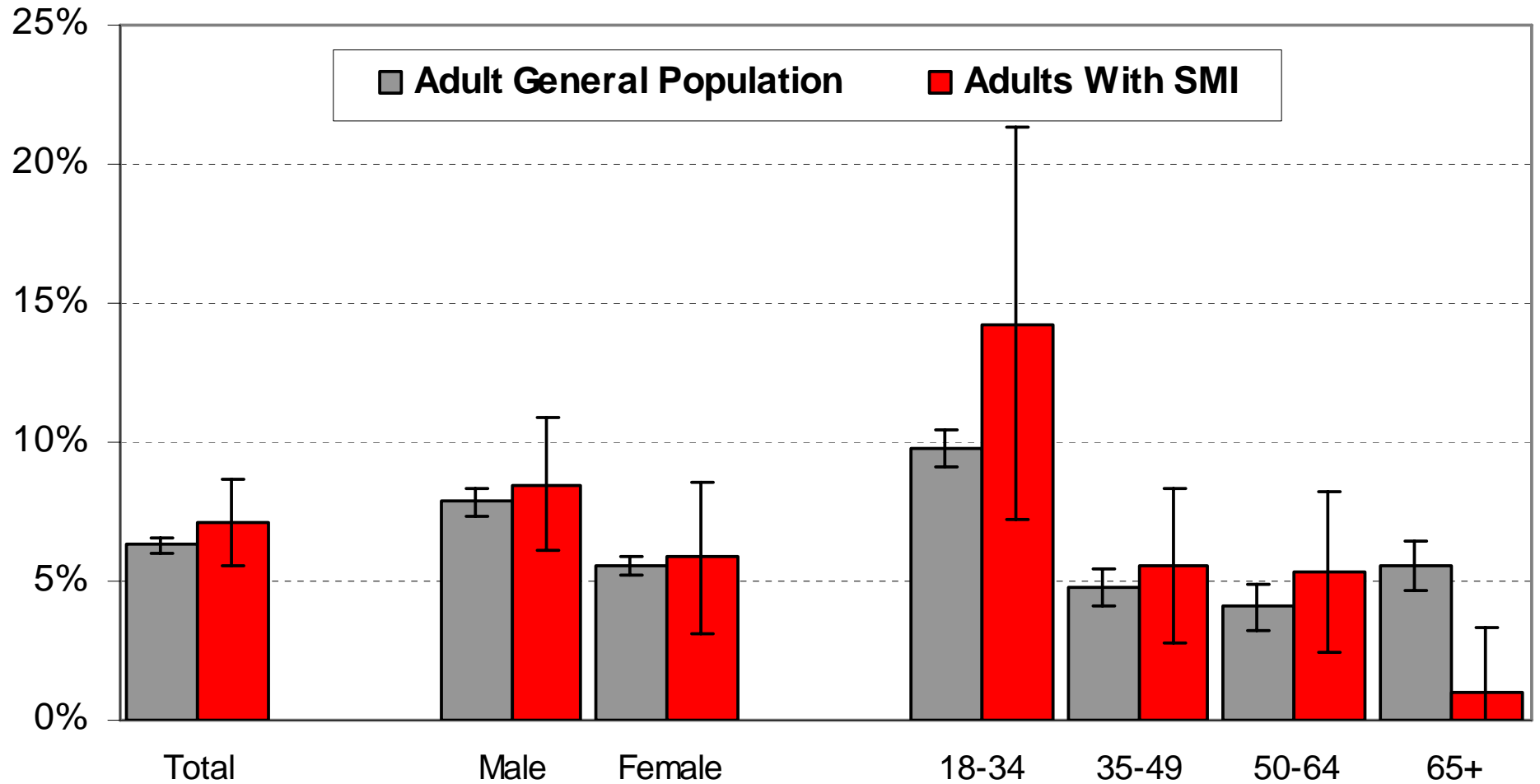
**During 12/20/04 through 5/02/05
In Vermont**

**“Increased Stability
in Housing”**

Ending Participation in Section 8 Between 12-20-04 and 05-02-05



Ending Participation in Section 8 Between 12-20-04 and 05-02-05



Data Driven System Transformation

Data Driven

17 States

632,628 in MH System

149,005 in Section 8

46,249 in Criminal Justice

NOMs Measures:

Crime and Criminal Justice

Stability in Housing

Employment / Education

Access / Capacity

Retention

Cost Effectiveness

Use of Evidence-Based Practice

Transformation Change Over Time

**Data are Everywhere
Data have been Everywhere**

Next Questions

How does your state compare?

How do these data compare to values?

**Inter-Relationships
among NOMs Measures**

The Bristol Observatory

Steven Banks and Karen Danyow

Vermont Mental Health Performance Indicator Project

John Pandiani, Joan Mongeon and Olivia Hunter

Special thanks to the consumers, service providers,
and database managers for producing and
maintaining the data used in these analyses.

**SAVE
THE
DATA**

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DATA**

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