

Report of the CMHS Data Infrastructure Grant Outcomes Workgroup

- Al Bidorini, CT
 - Craig Colton, UT
 - Vijay Ganju, NRI
 - Judy Hall, WA
 - Tracy Leeper, OK
 - Jocelyn Letourneau Therien, RI
 - Ted Lutterman, NRI
 - Roberta Ray, DE
 - Mary Smith, IL
 - Katie Weaver Randall, WA
- Priscilla Blackburn, DC
Steve Davis, OK
Olinda Gonzalez, CMHS
Edna Kamis-Gould, PA
Randy Lemoine, LA
Sapna Linus, ME
John Pandiani, VT
Maurice Tippet, DE
Sharon Spring, PA
soihlc@state.nd.us

Client Outcomes – Definitely Developmental Measures

- Table 19A – Adult Criminal Justice Involvement
- Table 19B – Juvenile Justice Involvement
- Table 19C – School Participation
- Table 19D – School Performance

So, we conducted a survey and found...

- Some states are using surveys to collect outcomes data
- Some states are using MH MISs and assessment forms to collect outcomes data
- Some states are using administrative databases to determine outcomes
- Some are doing some combination of the three approaches

Recommendations

Fund initiatives to

- Add other important outcomes
- Address calibration and psychometric issues
- Develop state capacity to produce standard outcome measures

States and Territories Survey

Summary of Status –
Summer 2003 as of
September 8, 2003 (n=49)

Adult Criminal Justice Involvement

Juvenile Justice Involvement

School Participation/Performance

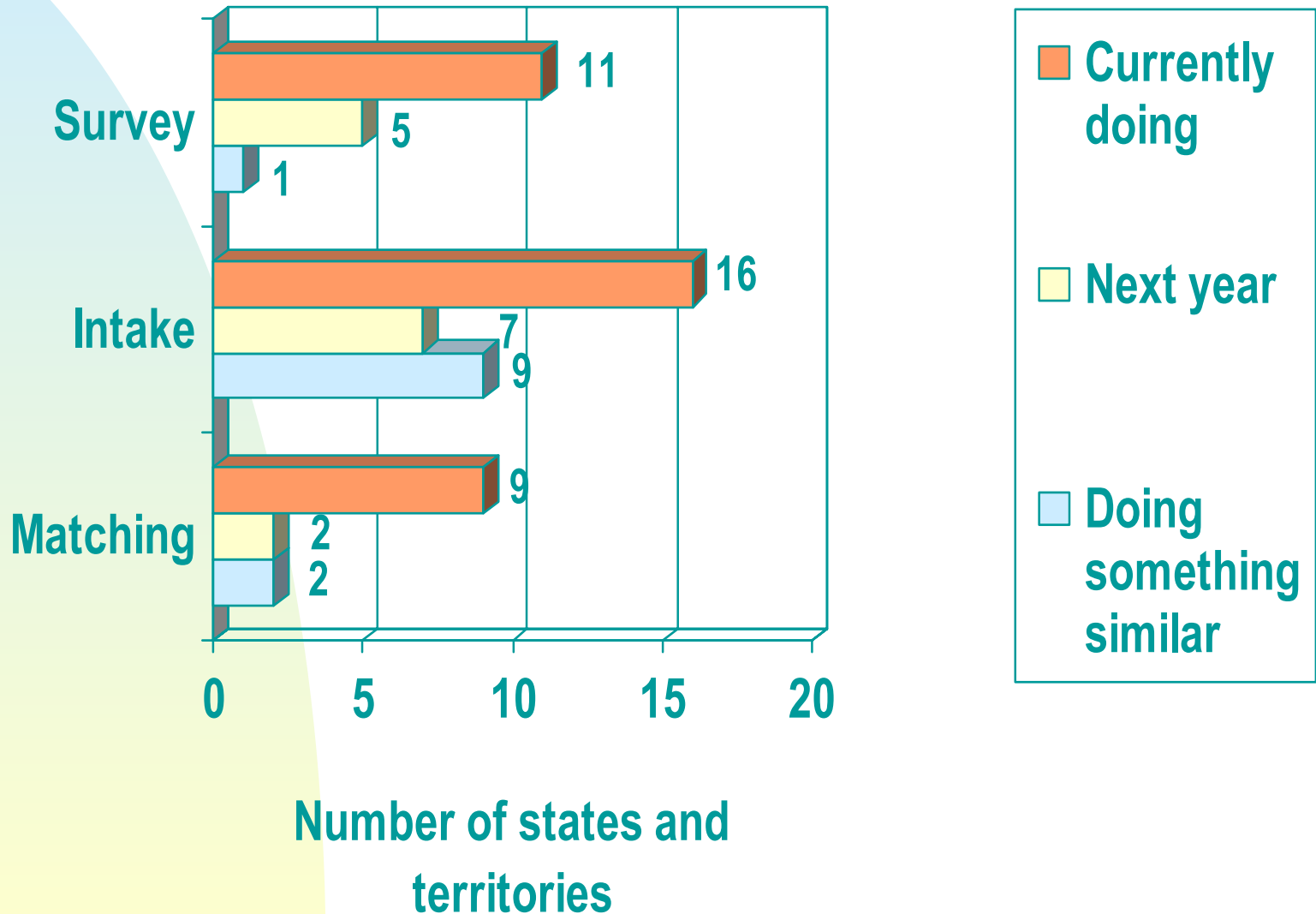
Adult Criminal Justice Involvement Juvenile Justice Involvement School Participation/Performance

- Currently doing this
- Planning to do this next year
- Currently doing something similar
- No current plans to do this
- Will do if required
- Other

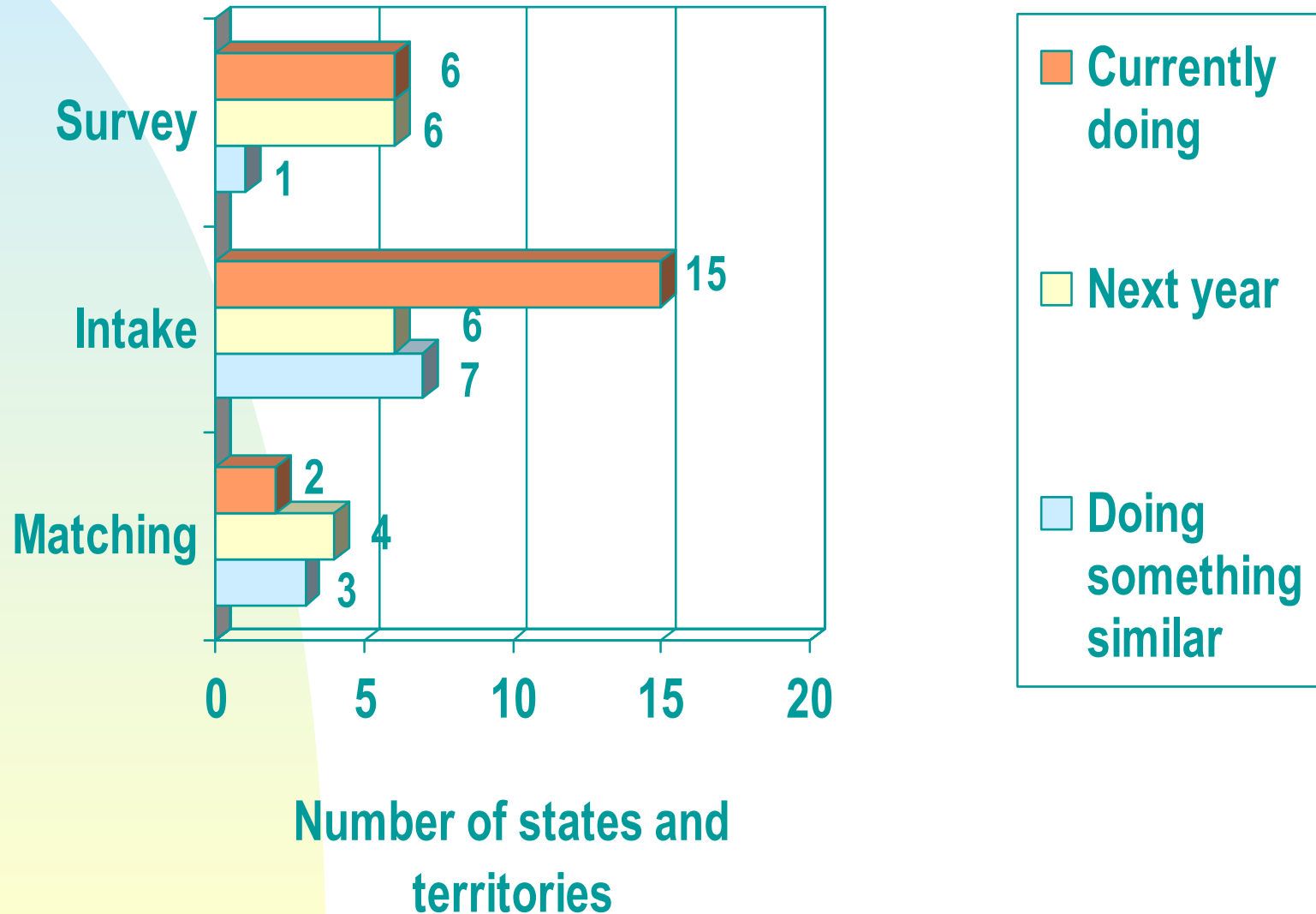
And how?

Intake, Survey, matching

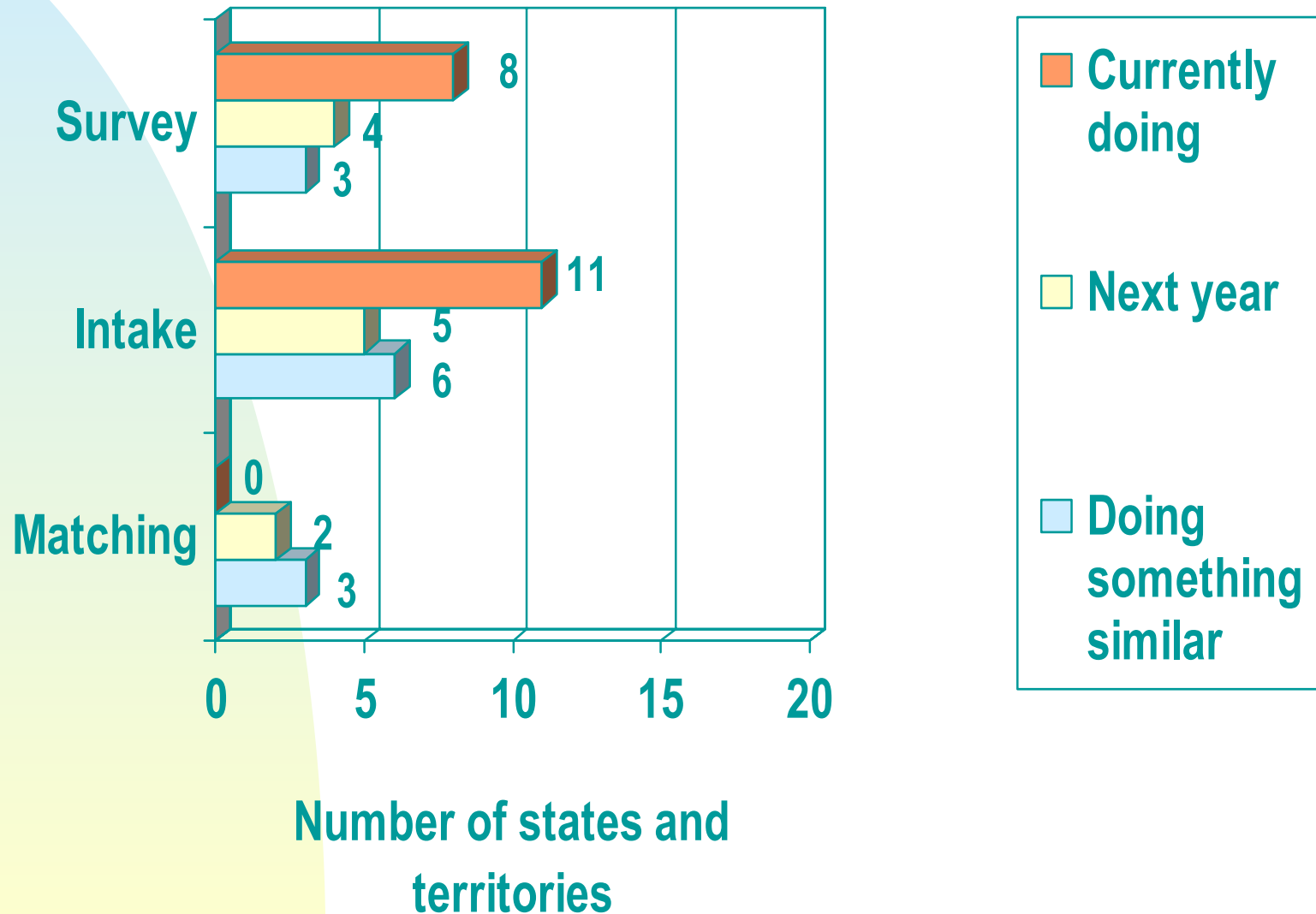
Adult Criminal Justice Involvement Outcome Number Using Each Data Collection Procedure Summer 2003 (49 States and territories)



Juvenile Justice Involvement Outcome Number Using Each Data Collection Procedure Summer 2003 (49 states and territories)



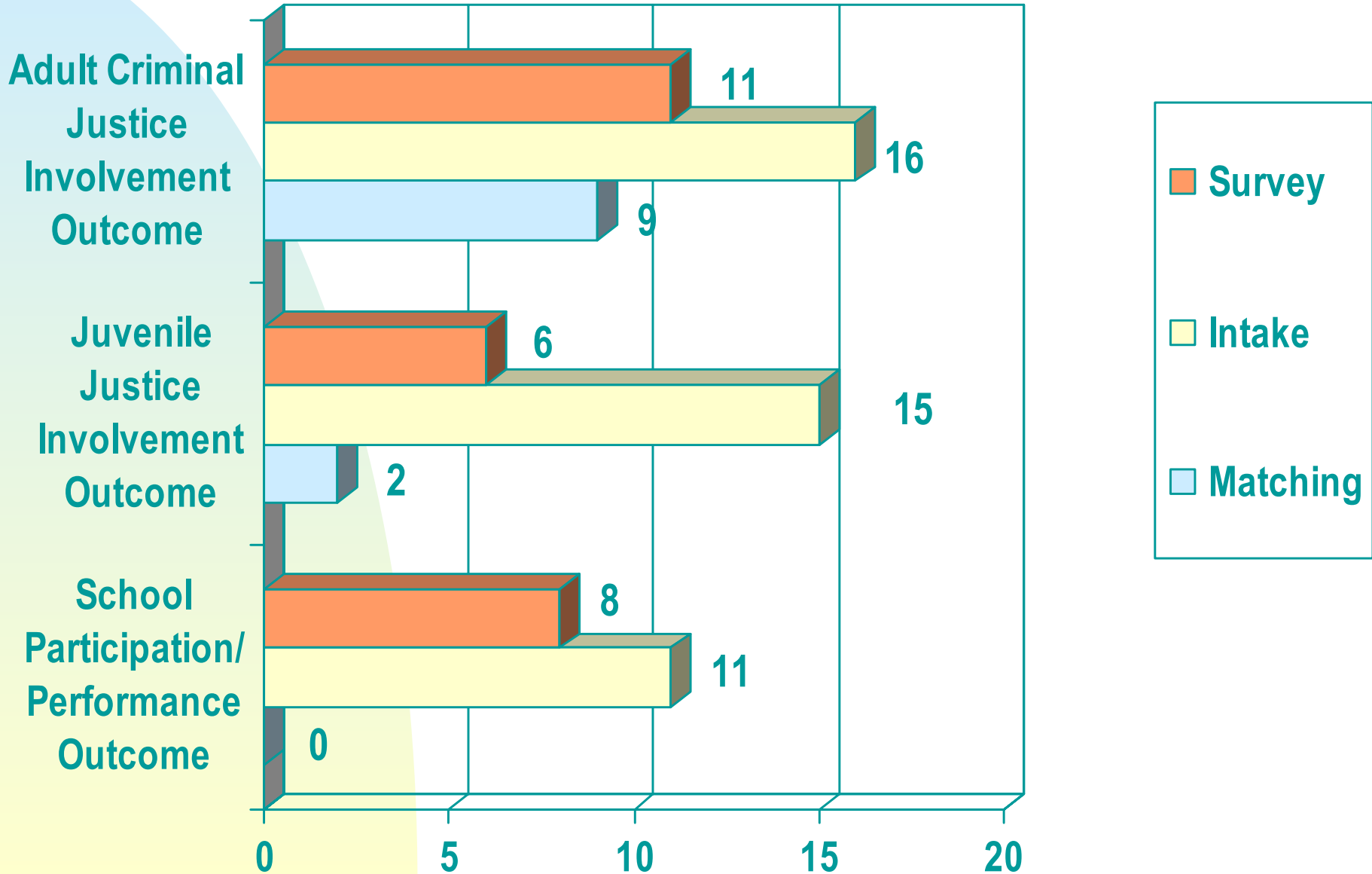
School Participation/Performance Outcome Number Using Each Data Collection Procedure Summer 2003 (49 states and territories)



Outcome Data Collection Procedures

Number Currently Using the Procedures for Outcomes

Status Summer 2003 (49 states and territories)



Questions:

- 1. What states are using more than one method to gather data for these outcome measures?**
- 2. What are they doing?**
- 3. How do they compare methods that they are using?**



So . . . “Let’s interview them.”

- Jocelyn Therien
- Katie Weaver-Randall
- Craig W. Colton

States using more than one method.

<u>State</u>	<u>Intake</u>	<u>Survey</u>	<u>Matching</u>
North Dakota	Adult Justice	Adult Justice	
Idaho	Adult Justice	Adult Justice	
Hawaii	Adult Justice	Adult Justice	
Delaware	Adult Justice		Adult Justice
Oklahoma	Adult Justice		Adult Justice
Vermont	Adult & Juvenile Justice		Adult & Juvenile Justice
Rhode Island		Adult Justice	Adult Justice
Colorado	Juvenile Justice	Juvenile Justice	
South Dakota	Juvenile Justice	Juvenile Justice	

--- 5 are using intake and survey methods.

--- 3 are using intake and matching methods.

--- 1 is using matching and survey methods.

--- Information was not obtained from 4 other states. They reported that they used different combinations of methods.

Intake Data Gathering

- ❖ 5/8 collect this information at more than one time point (e.g., intake, 6 month review, discharge).
- ❖ 6/8 collect this information on all clients.
- ❖ 8/8 states can break this data out by the demographics required by the DIG reporting: age, gender, race, and hispanic/non-hispanic

Survey Data Gathering

- ❖ **4/6 states are using the 28-item MHSIP survey with additional items added to collect this information. One state is using the YSS and the other is using the QOL survey. The states using the MHSIP survey to collect this information, all word their criminal justice questions differently.**
- ❖ **When the surveys are administered differs somewhat, with 2/6 states collecting it at intake and treatment review, 3 states collecting it yearly, and one state (HI) collecting it as part of a special study**
- ❖ **For whom data is collected differs by state, with one collecting it on all clients who received services, 2 collecting it on clients with SMI/SED, and others using different methods.**
- ❖ **Response rates vary from 15% - 78%.**
- ❖ **All states are able to break out the data by the required DIG demographics.**

Matching Administrative Data Bases

- ❖ *There are 4 states included in this summarization that are matching using administrative data bases from other state agencies.*
- ❖ **Agencies used include: Departments of Corrections, State Police, State Bureau of Criminal Investigations, Department of Public Safety, Court System and State Statistical Analysis Center.**
- ❖ **2 use de-identified data.**
- ❖ **Variables used: gender, dob, sex, race, SSN, last name, first name, middle name, aliases**
- ❖ **All 4 states can break out the matched data by age and gender, and 3 can break out the matched data by race and Hispanic and non Hispanic**

Preference of Methods

Intake versus Survey – 5 states (1 state still to report these data)

Provide most accurate results

Intake and survey equal – 2 states

Intake with CCAR – 1 State

Undecided – 1 State

Method that would be used if only one could be used

MHSIP surveys – 2

Intake with Quality of Life Survey – 1

Undecided – 1

Preference of Methods

Intake versus Matching – 3 states

Provide most accurate results

Matching – All 3 states

Method that would be used if only one could be used

Matching – 2 states

Matching best for state analyses – $\frac{1}{2}$

Intake best for clinicians – $\frac{1}{2}$

Preference of Methods

Survey versus Matching – 1 state

Provide most accurate results

Matching – 1 state

Method that would be used if only one could be used

Matching – 1 states



**So, we conducted a
survey and found...**

**wide variations do exist
in developing these
outcome measures.**

The CMHS Data Infrastructure Grant Outcomes Workgroup will be looking at the submissions for Tables 19a, 19b, 19c and 19d.



How can consensus be found?

**Reach consensus about
outcome measures for**

Adult Criminal Justice Involvement

Juvenile Justice Involvement

School Participation/Performance

through sharing ideas.

Using Intake to Collect Outcome Measures

Katie Weaver Randall, M.A.
Mental Health Division
Department of Social & Health Services
Washington State

Developing Outcome Measures from Intake/Administrative Data

- Washington State's Experience
 - ◆ Reporting employment and residential situation as status indicators
 - ◆ Still using the Intake/Administrative data - moving from status indicators to outcome "change over time" measures
 - ◆ Consumer outcomes system (COS)

Employment Status

- The % of adults (18-64) who were employed at any time during a FY
 - ◆ FY00 - 13.5%
 - ◆ FY01 – 14.9%
 - ◆ FY02 – 16.4%

Residential Status

- % of Adults who lived independently at any time during a FY
 - ◆ FY01 – 69.5%
 - ◆ FY02 – 69.6%

Moving from Status Indicators to “Change Over Time” Measures

- Issues to Consider when using Intake/Administrative Data for “Change Over Time” measures
 - ◆ Which outcomes to value and expect
 - ◆ Coming to terms with pre-existing data element definitions (e.g., employment)
 - ◆ What constitutes positive change
 - ◆ What interval to use in measuring change
 - ◆ For whom to measure change in specific outcomes (e.g., age group, length in services, diagnosis)

Moving from Status Indicators to “Change Over Time” Measures

- Advantages of using Intake/Administrative Data for “Change Over Time” measures
 - ◆ Uses already existing business practices.
 - ◆ Data available statewide
 - ◆ Data available for all consumers

Change In Employment Status

Table 1: Employment Change for Long-Term Service Recipients - Adults (18-64)

	Total Number Adults Served (18-64)***	Number of Adults Served who were Employed at Some Point in the FY	% of Adults Served who were Employed at Some Point in the FY	Employed to Employed	% Employed to Employed	Employed to Not-Employed	% Employed to Not-Employed	Not-Employed to Employed	% Not-Employed to Employed	Not-Employed to Not-Employed	% Not-Employed to Not-Employed	Number of Clients with less than 2 Employment Statuses	% of Clients with less than 2 Employment Statuses
FY02*	27656	4361	15.77%	1927	6.97%	757	2.74%	1113	4.02%	20043	72.47%	3810	13.78%
FY03**	29581	3157	10.67%	2370	8.01%	596	2.01%	557	1.88%	21341	72.14%	4717	15.95%

*To be counted in FY02 the adult had to receive service in FY00, 01, and 02 and have 2 or more employment status' reported in FY02. Their employment status was determined by looking at the earliest and most recent status reported in FY02.

**To be counted in FY03 the adult had to receive service in FY01, 02, and 03 and have 2 or more employment status' reported in FY03. Their employment status was determined by looking at the earliest and most recent status reported in FY03.

***This includes all adults (18-64) who were served, even if they have less than 2 employment statuses in a FY, in FY00, 01, 02 for FY02 and all adults (18-64) who were served in FY00, 01, 02 for FY03.

Change In Homelessness Status

Table 1: Homeless Status Change - Children (0-17)

	Total Number Served	Total Number of Children who were Homeless at Some Point in FY	Homeless to Homeless	% Homeless to Homeless	Homeless to Not-Homeless	% Homeless to Not-Homeless	Not-Homeless to Homeless	% Not-Homeless to Homeless	Not-Homeless to Not-Homeless	% Not-Homeless to Not-Homeless	Number of Children with less than 2 homeless statuses in the FY	% of Children with less than 2 homeless statuses in the FY
FY01	35846	545	220	0.61%	97	0.27%	72	0.20%	23437	65.38%	10054	28.05%
FY02	37430	619	249	0.67%	100	0.27%	70	0.19%	23003	61.46%	11046	29.51%
FY03	37402	624	301	0.80%	126	0.34%	74	0.20%	27061	72.35%	9840	26.31%

Table 2: Homeless Status Change - Adults (18+)

	Total Number Adults Served (18+)	Total Number of Children who were Homeless at Some Point in FY	Homeless to Homeless	% Homeless to Homeless	Homeless to Not-Homeless	% Homeless to Not-Homeless	Not-Homeless to Homeless	% Not-Homeless to Homeless	Not-Homeless to Not-Homeless	% Not-Homeless to Not-Homeless	Number of Adults with less than 2 homeless statuses in the FY	% of Adults with less than 2 homeless statuses in the FY
FY01	84852	6190	1804	2.13%	982	1.16%	805	0.95%	45728	53.89%	31177	36.74%
FY02	87749	6797	2184	2.49%	1148	1.31%	848	0.97%	43845	49.97%	33481	38.16%
FY03	89171	6854	3192	3.58%	1077	1.21%	798	0.89%	51737	58.02%	32367	36.30%

Change in Volunteer Status

Table 1: Volunteer Status Change - Adults (18+)

	Total Number Adults Served (18+)	Total Number of Adults who Volunteered at Some Point in Time	Employed to Volunteer	% Employed to Volunteer	Not-Employed to Volunteer	%Not-Employed to Volunteer	Volunteer to Employed	% Volunteer to Employed	Volunteer to Volunteer	% Volunteer to Volunteer
FY01	84950		72	0.08%	425	0.50%	91	0.11%	909	1.07%
FY02	87758		73	0.08%	293	0.33%	336	0.38%	127	0.14%
FY03	88997		22	0.02%	150	0.17%	31	0.03%	315	0.35%

Table 2: Volunteer Status Change - Older Adults (60+)

	Total Number Older Adults Served (60+)	Total Number of Adults who Volunteered at Some Point in Time	Employed to Volunteer	% Employed to Volunteer	Not-Employed to Volunteer	%Not-Employed to Volunteer	Volunteer to Employed	% Volunteer to Employed	Volunteer to Volunteer	% Volunteer to Volunteer
FY01	13188		3	0.02%	21	0.16%	4	0.03%	52	0.39%
FY02	12950		2	0.02%	20	0.15%	10	0.08%	9	0.07%
FY03	12753		0	0.00%	13	0.10%	1	0.01%	32	0.25%

Consumer Outcomes System (COS)

- Legislature directs Mental Health Division to develop an outcomes system.
- Consumer outcomes workgroup formed with RSN, Provider, Consumer & MHD representatives.
- National RFP process to select the vendor.
- Implementation workgroup convened in January, 2003.
- Pilot sites recruited and trained in September, October, 2003.
- Pilot data collected in November, 2003.
- Implementation completed at all sites April, 2004.

Adult Outcomes Instrument: Domains

- Quality of Life: Portions of California Quality of Life, 24 items
 - ◆ Add relevant DIG questions
 - Functioning: Multnomah Community Ability Scale, 17 items
 - ◆ Add relevant DIG questions
 - Side Effects: Subjective Side-Effects Rating Scale, 5 items
 - Recovery: Recovery Assessment Scale, 5 items
 - Symptoms: Symptom Checklist 10-R, 10 items
 - Substance Abuse: Branch to Addiction Severity Index, 9 items
- ❖ *Total: 66 items (max. 73 items)*
- ❖ *Estimated Completion Time: 10-20 minutes*

Consumer Outcomes System

- Advantages of Developing a New System
 - ◆ Can decide which domains to measure based on clinical knowledge and the state of the field.
 - ◆ Can base measurement decisions on current knowledge base.
 - ◆ Can use measures that are sensitive to change.

Consumer Outcomes System

- Challenges of Developing a New System
 - ◆ Changing current practices
 - ◆ Conveying the value of outcomes measurement to stakeholders
 - ◆ Creating consensus between stakeholders

Next Steps in Washington

- Continued refinement of clinician reports to increase their readability and usefulness.
- Analysis and modification of the existing tool.
Continue Implementation across the state.
- Hold fast to vision of consumer outcome measurement in face of resistance to change.
- Begin to examine change-over-time analyses.
Create and widely disseminate statewide reports.
- Train agencies how to use outcome information to improve services.

Using Consumer Surveys to Collect Outcome Data

Judy Hall, Ph.D.

Data Infrastructure Grant Meeting

December 4, 2003

Instruments

- MHSIP Adult Consumer Survey
 - ◆ Administered to adults age 18 and older
- Youth Services Survey for Families (YSS_F)
 - ◆ administer to parents, guardians, or other caregivers for identified youth receiving services
 - ◆ Used for standard reporting
- Youth Services Survey (YSS)
 - ◆ administer to youth age 13 and older
 - ◆ optional

Outcome Questions

Adult Consumer Survey

- I deal more effectively with daily problems.
- I am better able to control my life.
- I am better able to deal with crisis.
- I am getting along better with my family.
- I do better in social situations.
- I do better in school and/or work.
- My symptoms are not bothering me as much.
- My housing situation has improved.

Youth Satisfaction Survey

- I am better at handling daily life.
 - I get along better with family members.
 - I get along better with friends and other people.
 - I am doing better in school and/or work.
 - I am better able to cope when things go wrong.
 - I am satisfied with my family life right now.
- *In the last month, did you get arrested by the police?**
- *In the last month, did you go to court for something you did?**
- *How often were you absent from school?**

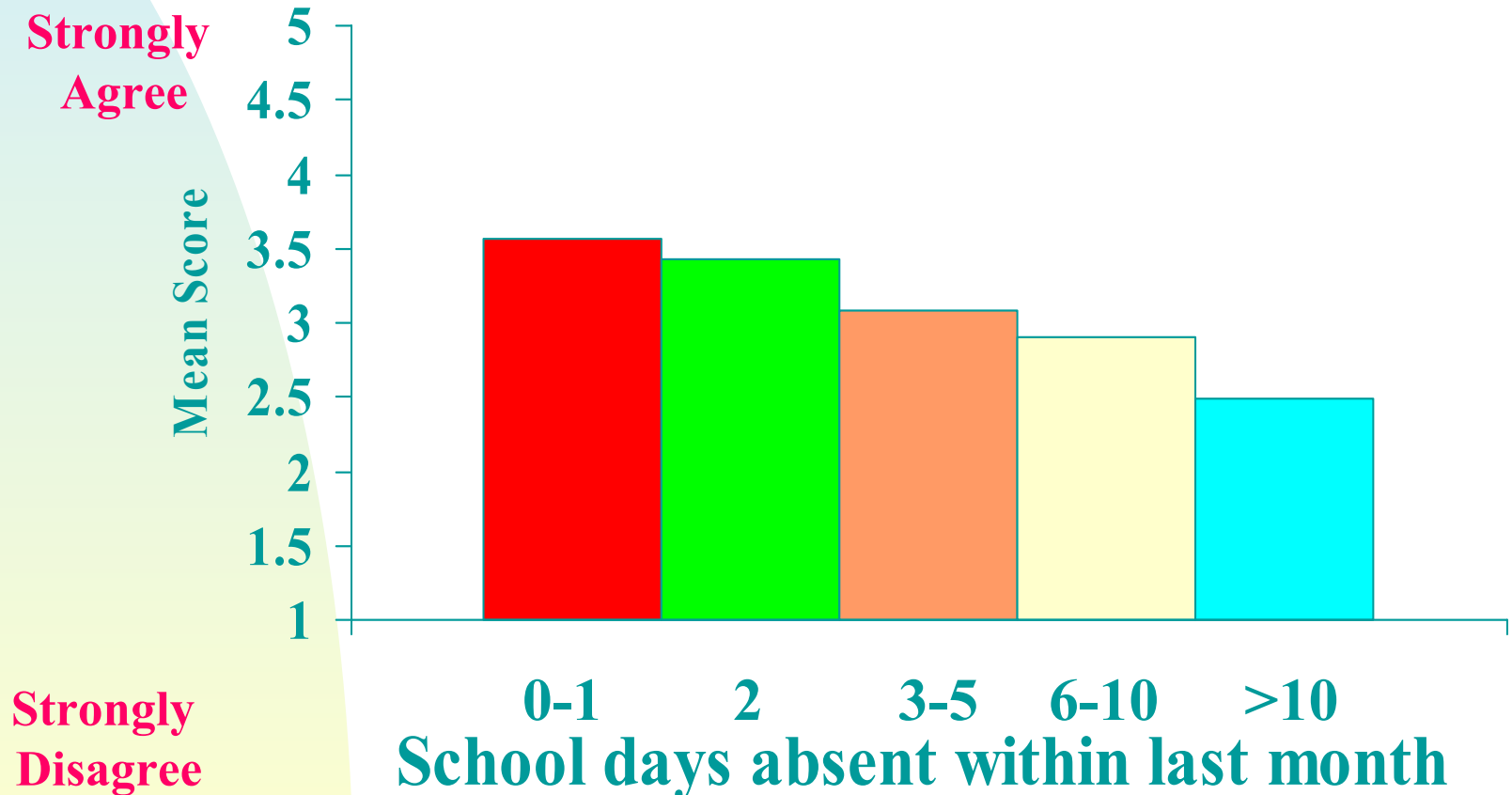
Relation of Outcome Domain to other Functioning Indicators

- Caregiver ratings of improved child outcome negatively associated with caregiver reports of:
 - school absence in last month
 - youth arrested in last month - youth in court in last month
 - youth in out of home placement in last six months
- Associations remain after adjustment for other demographic and service factors

Association of Recent School Absence to YSSF Outcome Domain

Improved?

P for trend < 0.001



Strongly Disagree

as reported by Molly Brunk, Ph.D.

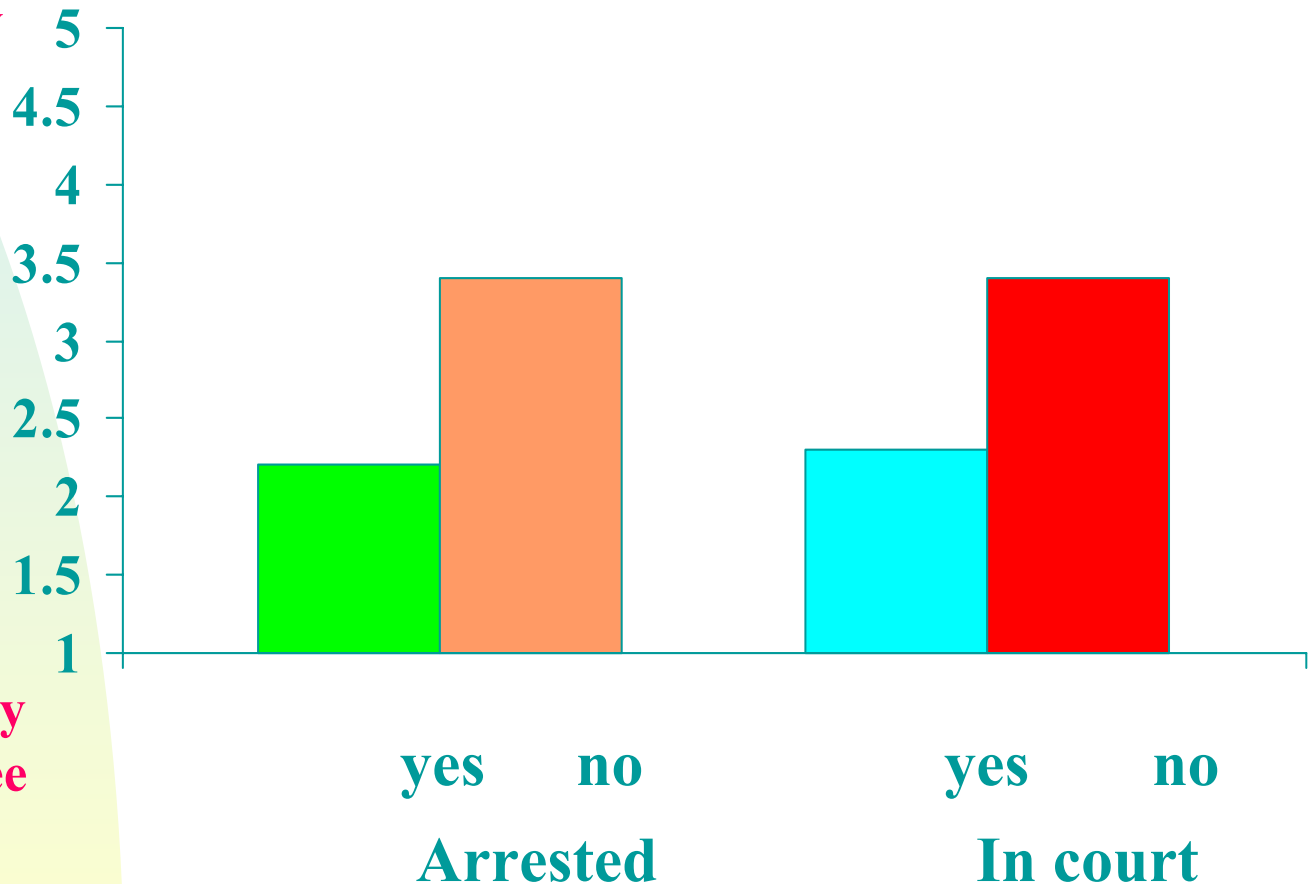
Association of Juvenile Justice Involvement to YSSF Outcome Domain

Improved?

Strongly Agree

Mean score

Strongly Disagree



as reported by Molly Brunk, Ph.D.

Conclusions about Outcome Domain

- Caregiver perceptions of outcome influenced by factors including:
 - ◆ Initial level of functioning
 - ◆ Current service status (in services or not)
 - ◆ Current residence with respondent
 - ◆ Recent difficulties with legal or school system
- Outcome Domain likely to reflect recent functioning

Different Views of Services

- Youth reported themselves as having more positive outcomes (60%) than the caregivers (46%)
- Caregivers of male children reported less positive outcomes than caregivers of female children
- Caregivers of children still living with them reported more positive outcomes

as reported by Molly Brunk, Ph.D.

URS Indicators- Table 19

Adults

- Criminal Justice
 - ◆ *Arrests*
 - ◆ Prison Incarcerations
 - ◆ Jail Incarcerations

Children

- Juvenile Justice
 - ◆ *Arrests*
 - ◆ Prison Incarcerations
 - ◆ Jail Incarcerations
- School Attendance
 - ◆ *Days attended*
 - ◆ Participate in Standard tests
 - ◆ Mainstreamed
- School Performance
 - ◆ Standardized test scores
 - ◆ Grade point average
 - ◆ Promoted to next grade
 - ◆ *Other*

Indicator Recommendations

From MHSIP Website

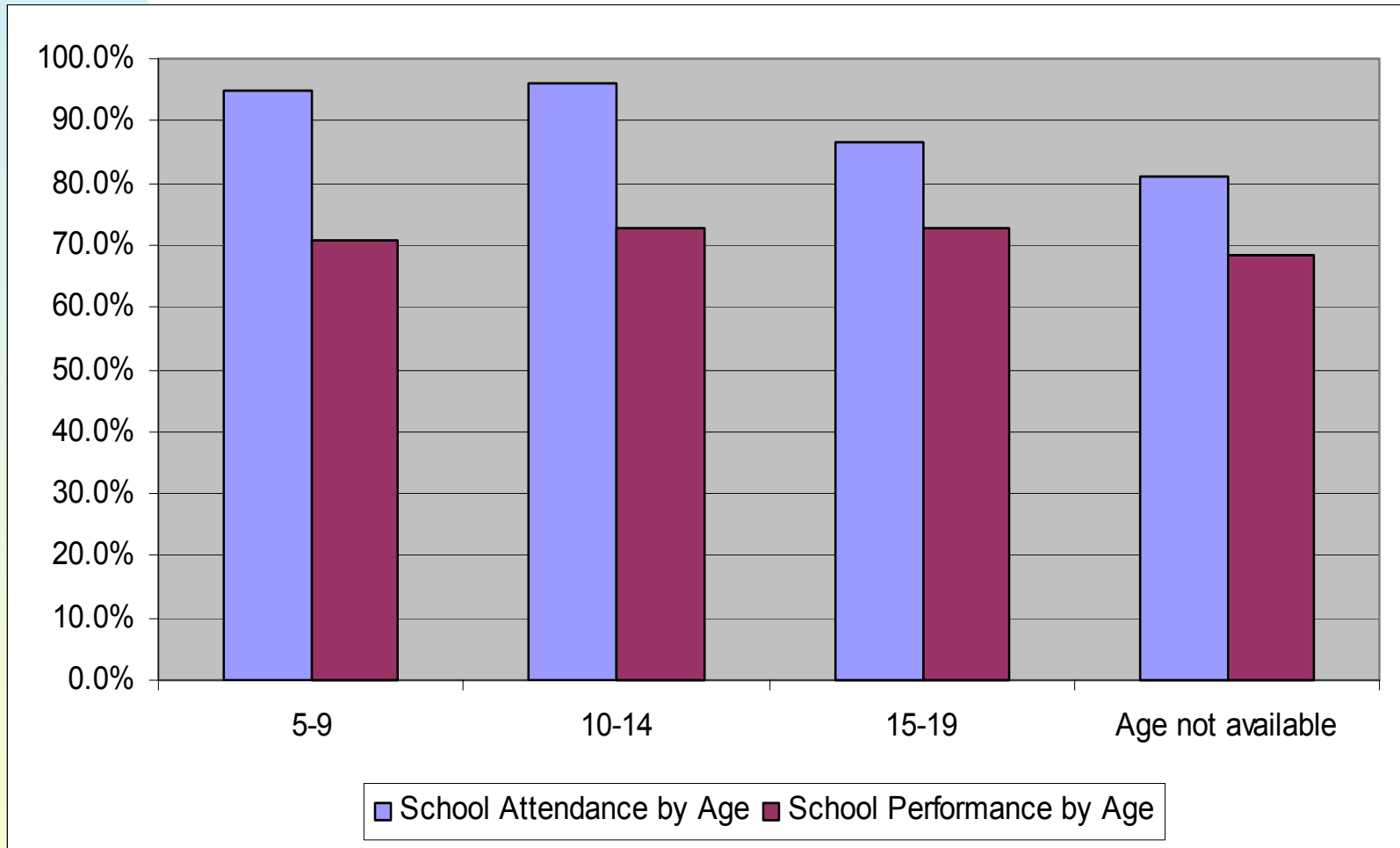
- Surveys are not recommended for measuring the school attendance and juvenile justice indicators.
 - ◆ Items related to this on survey (Q30, Q31, Q32) are for descriptive information **only** and are optional.
 - ◆ Use to clarify findings on other indicators (e.g., parents of youth involved in juvenile justice may report lower outcomes. Different benchmarks may be needed for the different groups)
 - ◆ Use as a measure of penetration (e.g., provider may serve higher percentage of youth with these problems)
 - ◆ Do not use as a measure of effectiveness or performance

Indicator Recommendations

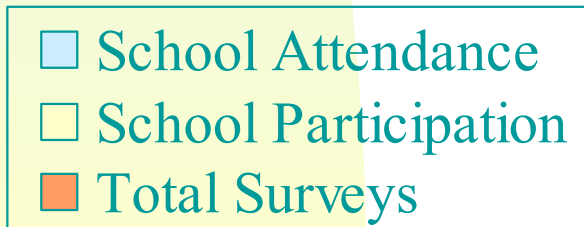
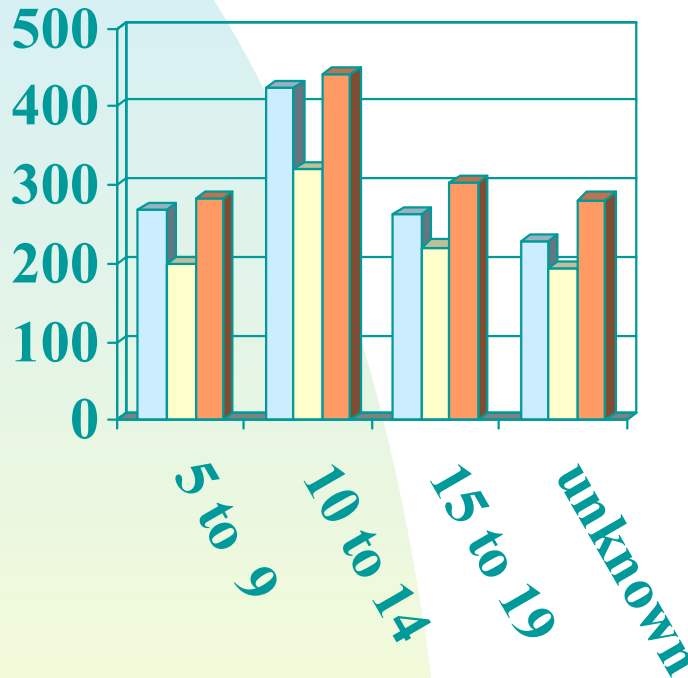
From MHSIP Website

- Performance indicators in the areas of school attendance and juvenile justice should be based on how the same individual changes over time.
 - ◆ Survey methodology not appropriate for collecting this type of information. Respondents can only reliably report on brief periods of time (e.g., one month)
 - ◆ Recommended methods include repeated measures via clinician interview or administrative data sets from appropriate agencies (e.g., school attendance records, arrest records)

School Performance in Washington State



The Numbers Behind the Indicator



We do collect the youth or parents self report of school attendance and the type of grades the child/youth receives in school on the MHSIP survey--

We have reported this data by condensing it into an indicator (percent of students with mostly C's and above)

Using Surveys to Measure Outcomes

- **Cohort change versus individual change over time**
 - ◆ Random samples best for cohort change
 - ☞ Will show small change over time
 - ◆ Individual change over time requires measuring the same individual at two points in time
 - ☞ Very difficult to do with random survey
- **Sampling considerations are critical**
 - ◆ To collect outcomes over time, no longer a random sample
 - ◆ Potential bias:
 - ☞ Get **Perceptions of Service** only for those who remain in service
 - ☞ Get **Outcomes** only for those who complete the survey.
- **Repeated measures**
 - ◆ When is initial assessment point
 - ◆ How frequently to collect

Recommendations

- Use surveys to collect Table 19 data as developmental step, if no other options available.
- Be sure to capture lots of demographic information so you can understand the results you get.
- Keep track of who responds (those whose outcomes are counted) and who refuse or do not respond (those whose outcomes are “missing”).

Cross-Database Analysis

COST EFFECTIVE

Valid

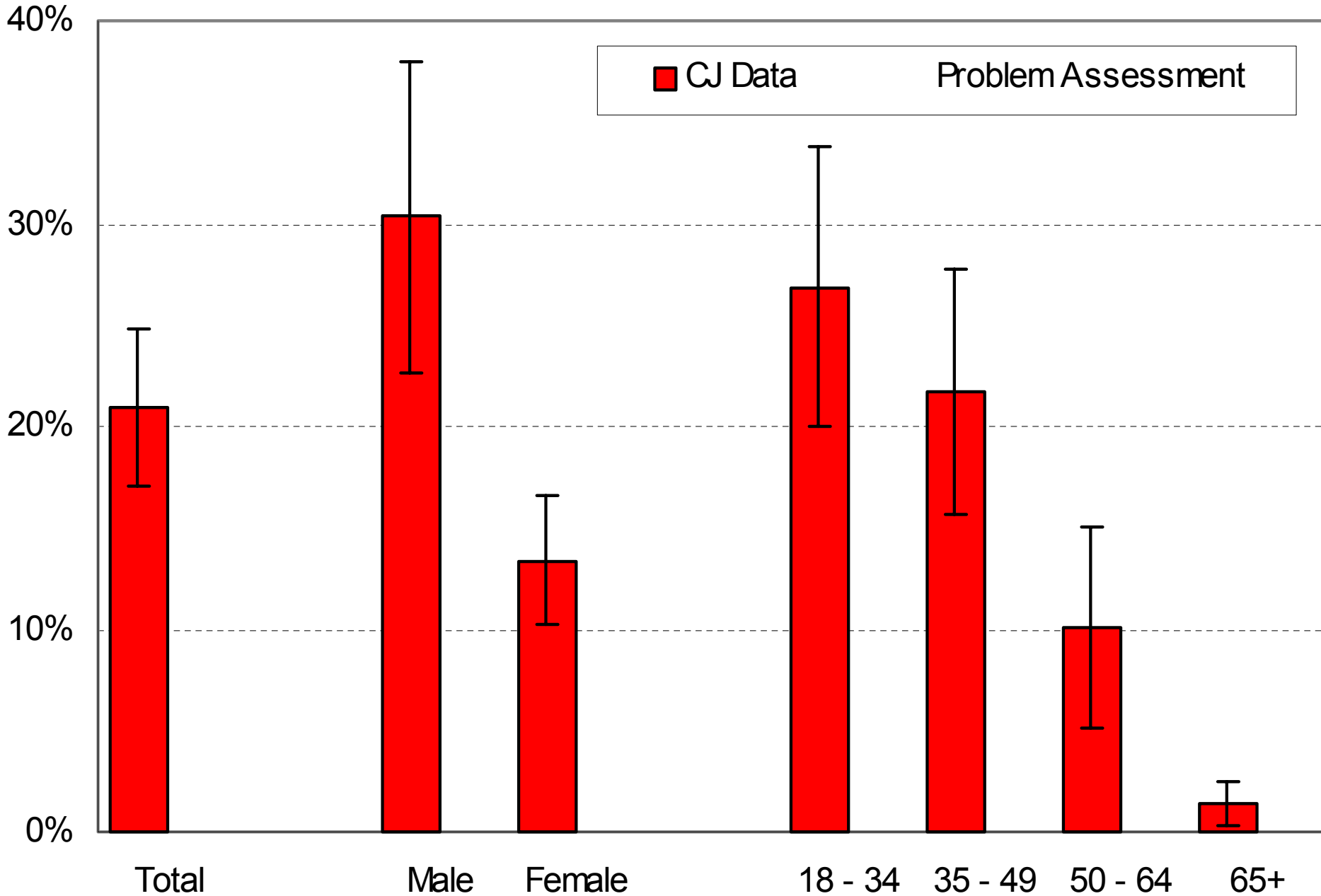
Detailed

Comprehensive

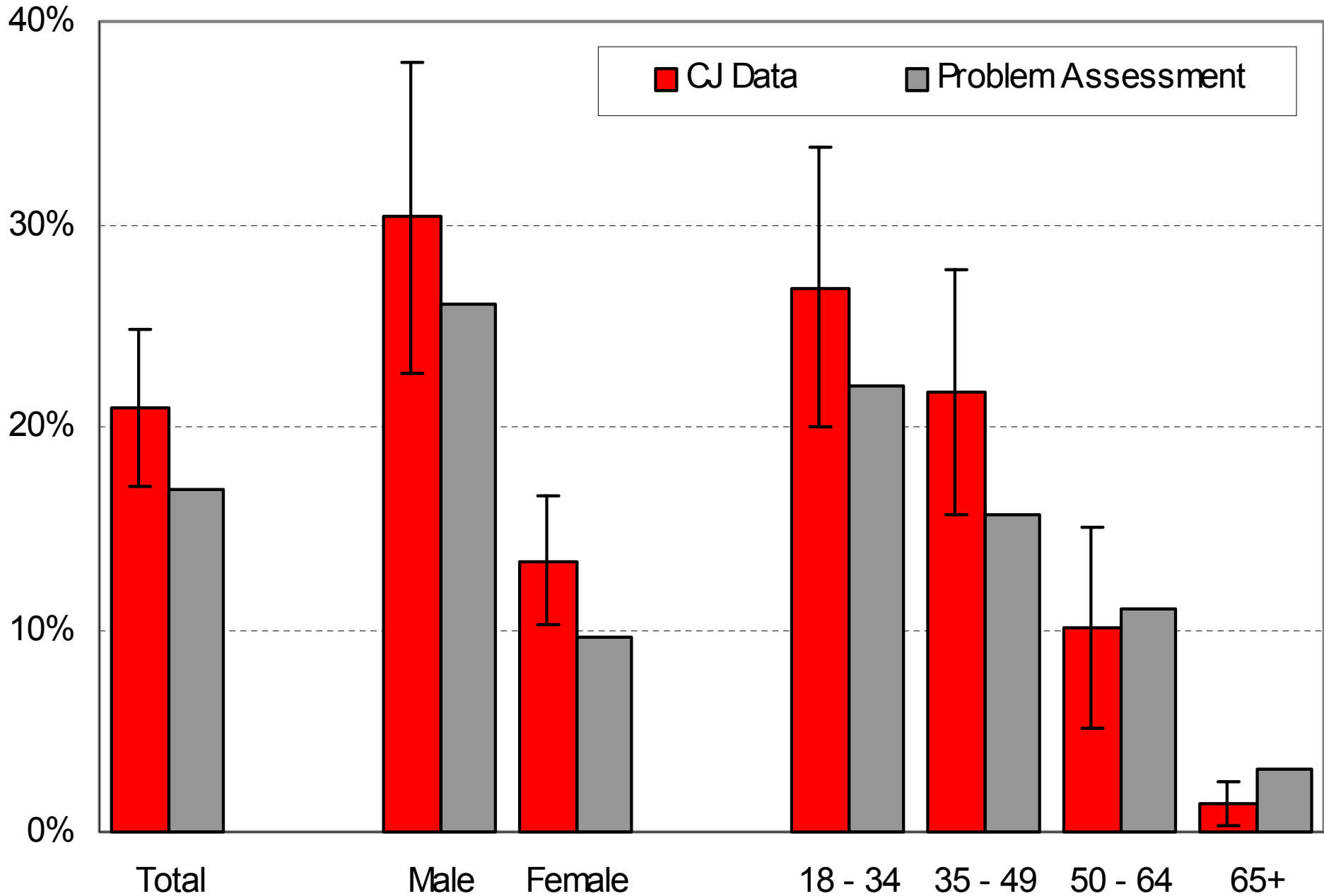
Objective

VALID

Cross-Database Versus MH MIS: Criminal Justice

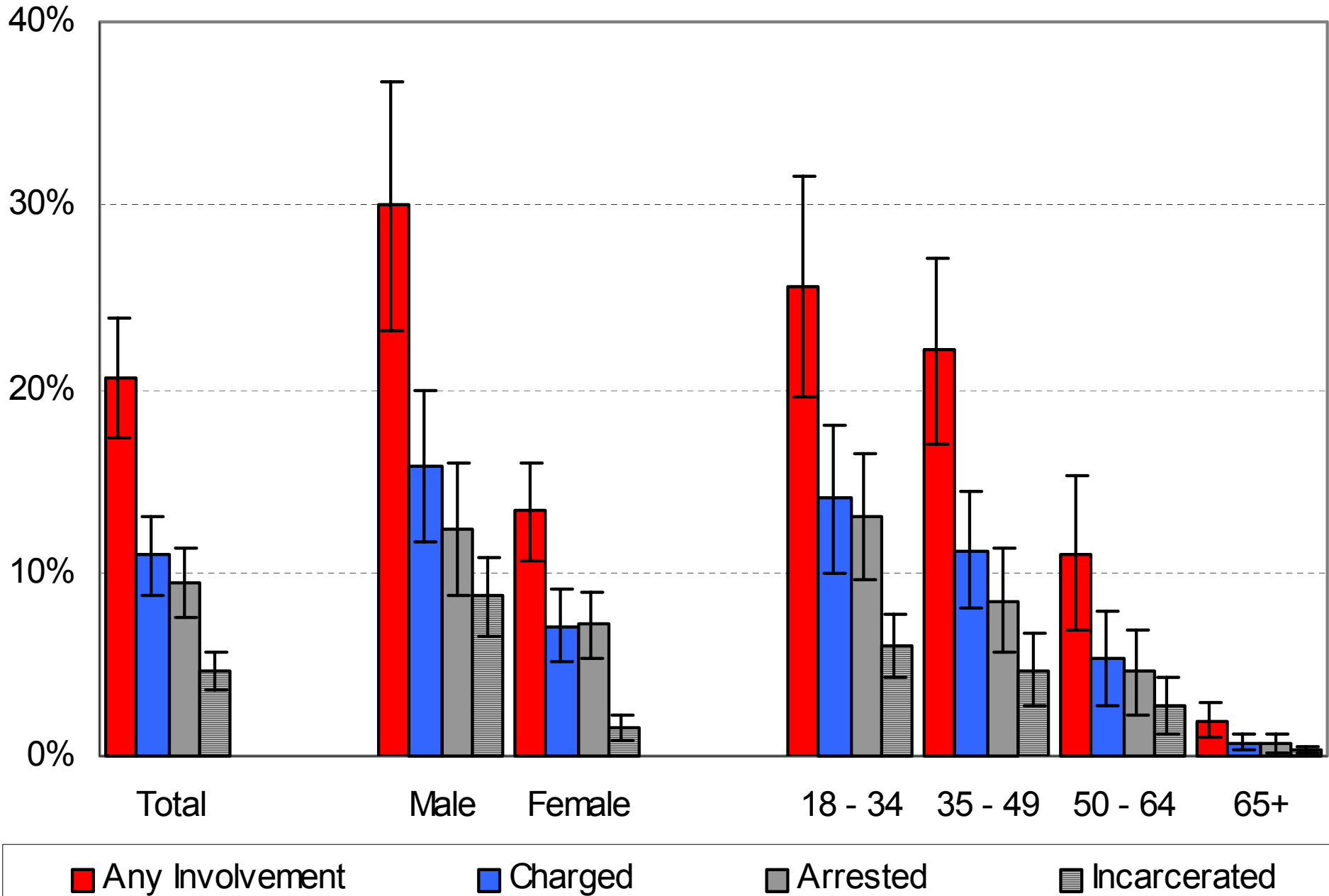


Cross-Database Versus MH MIS: Criminal Justice



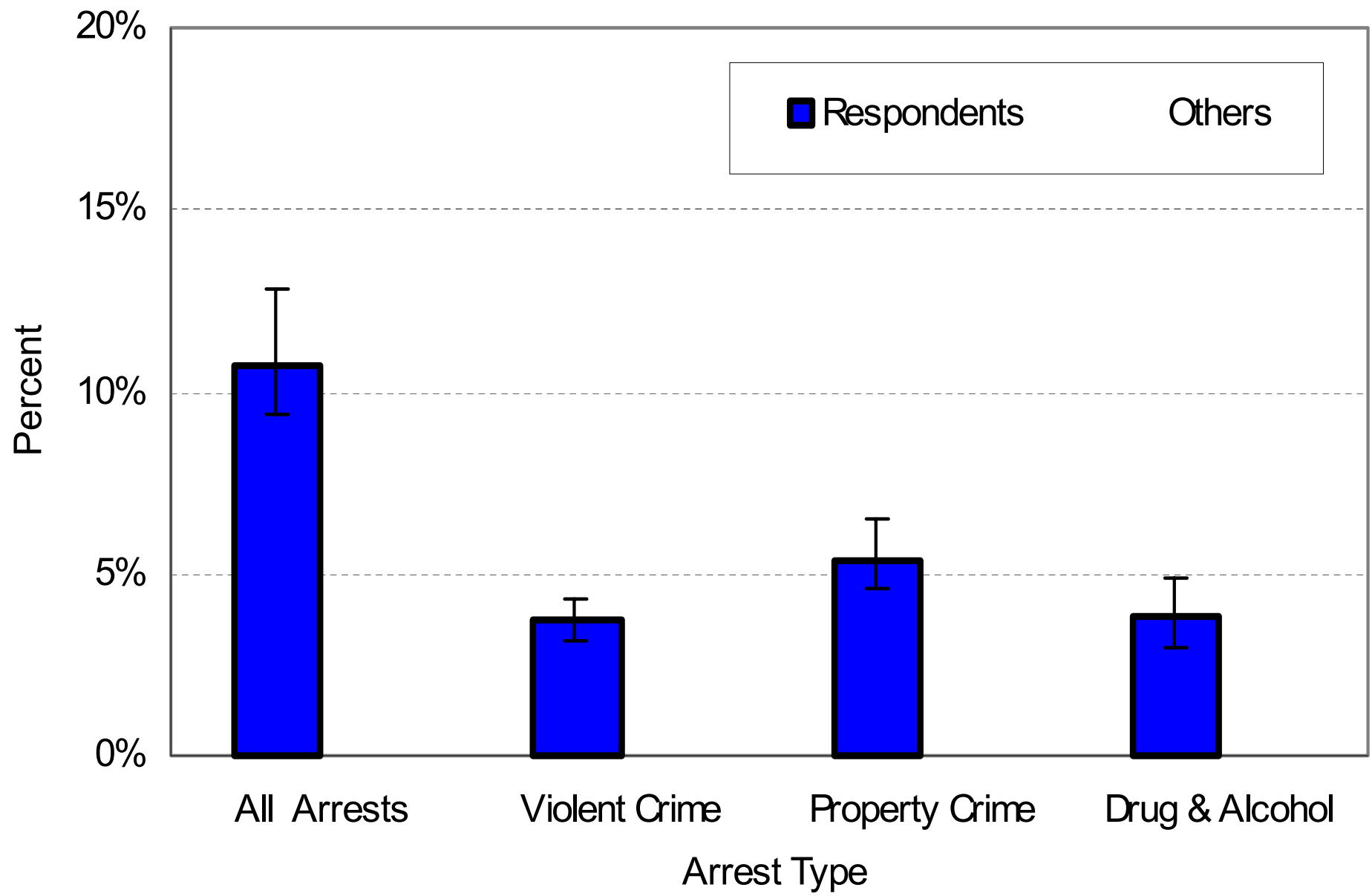
DETAILED

Four Measures of Criminal Justice Involvement

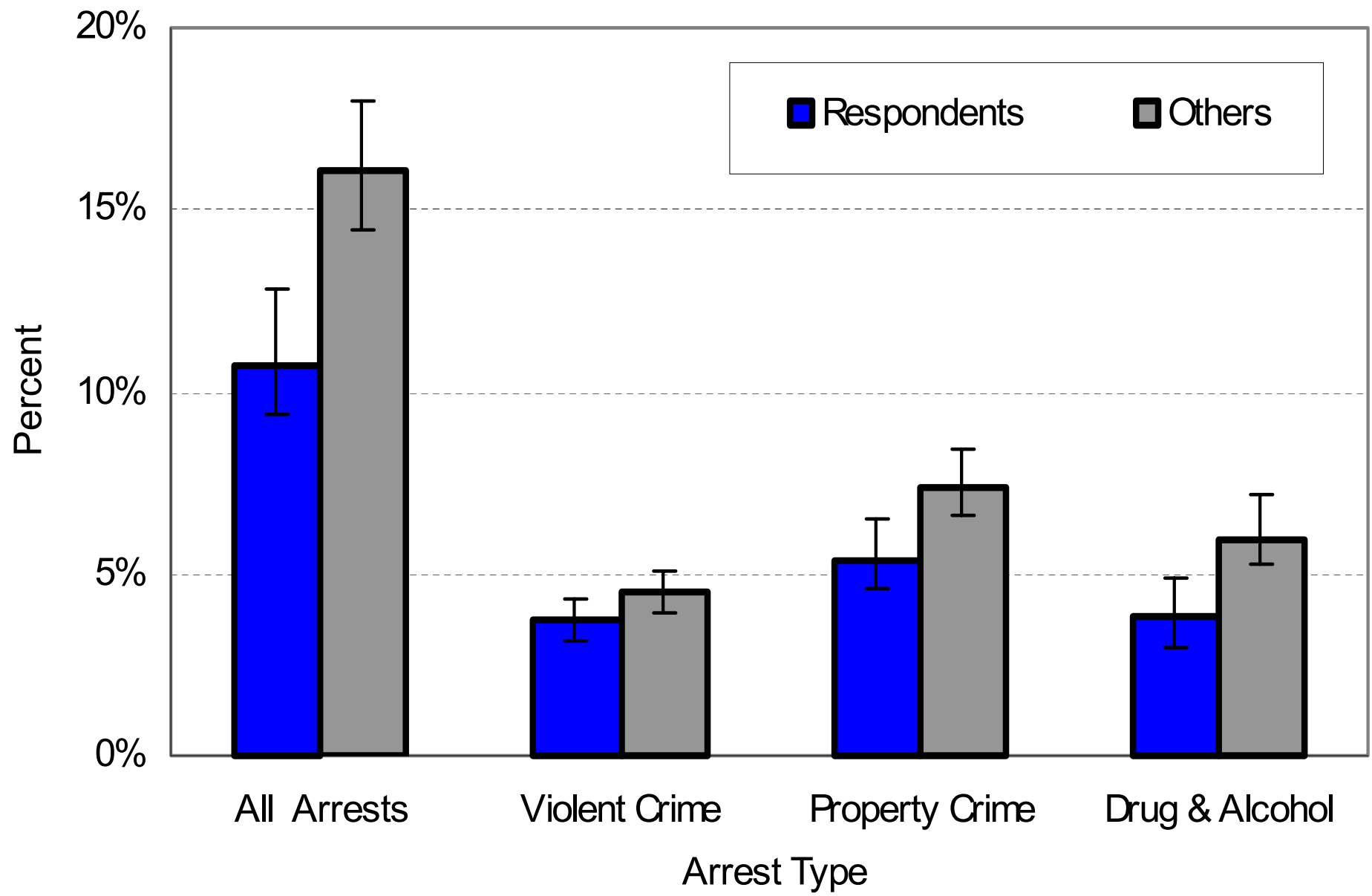


COMPREHENSIVE

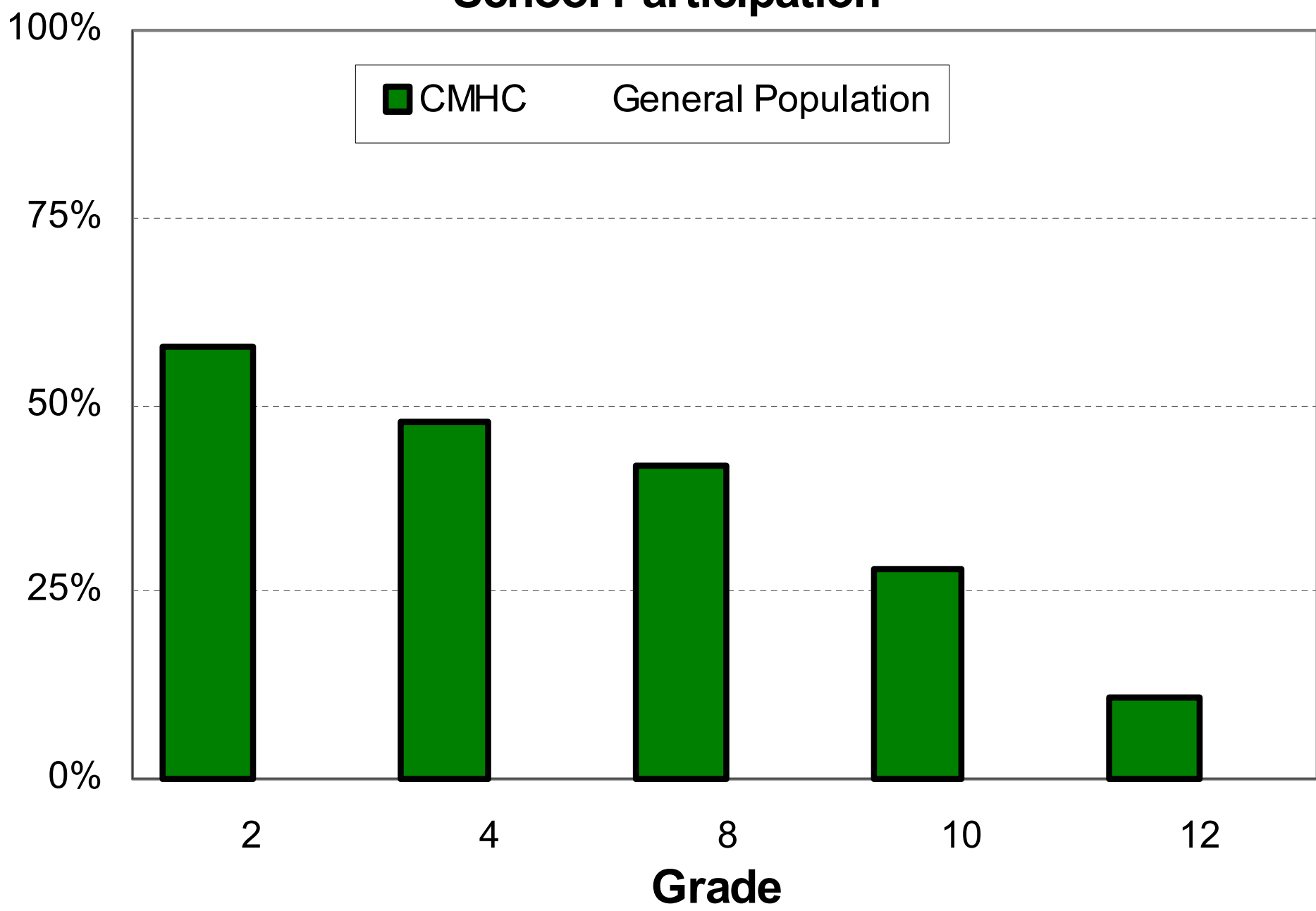
Arrest Rates for Children's Survey Respondents and Others



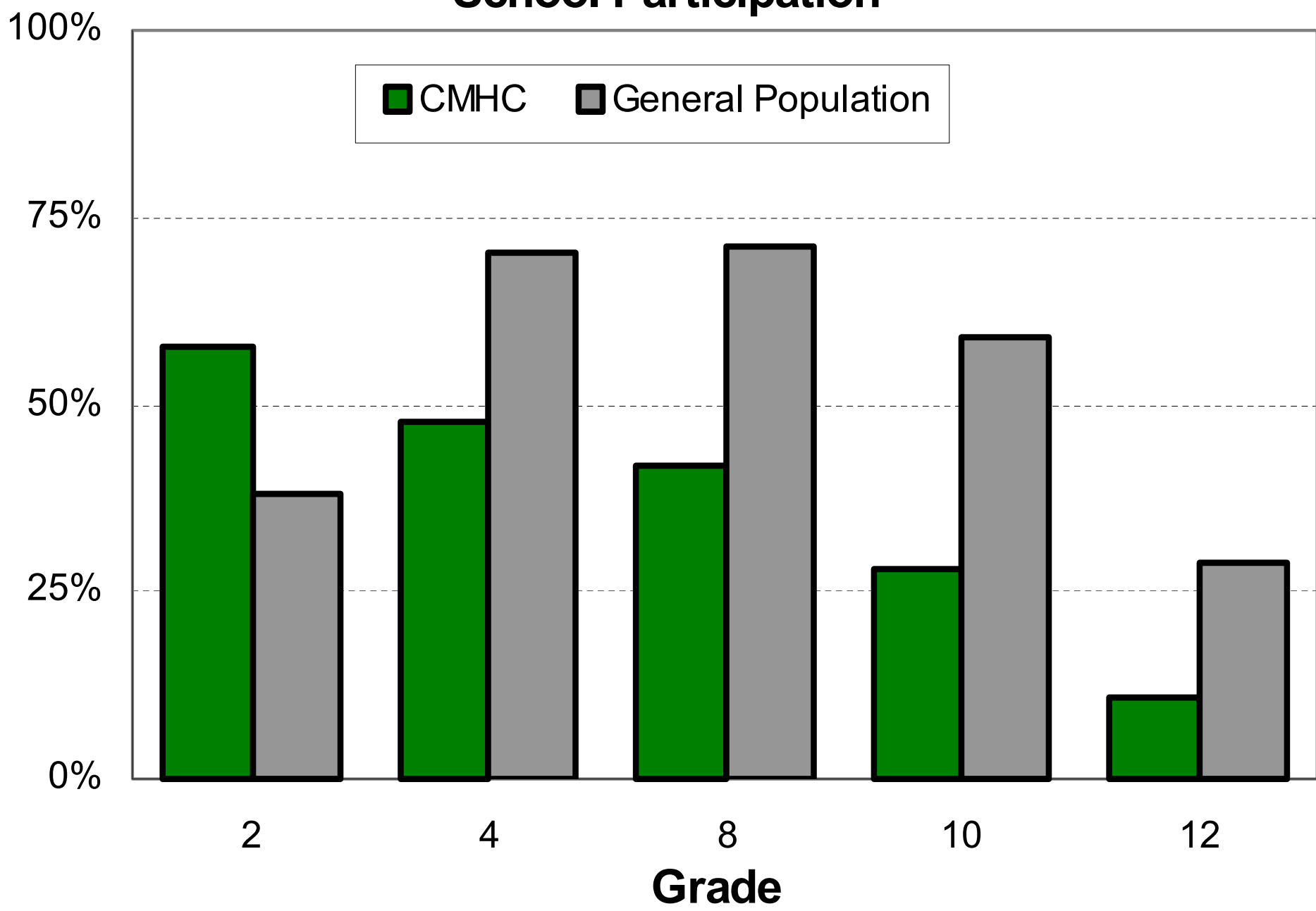
Arrest Rates for Children's Survey Respondents and Others



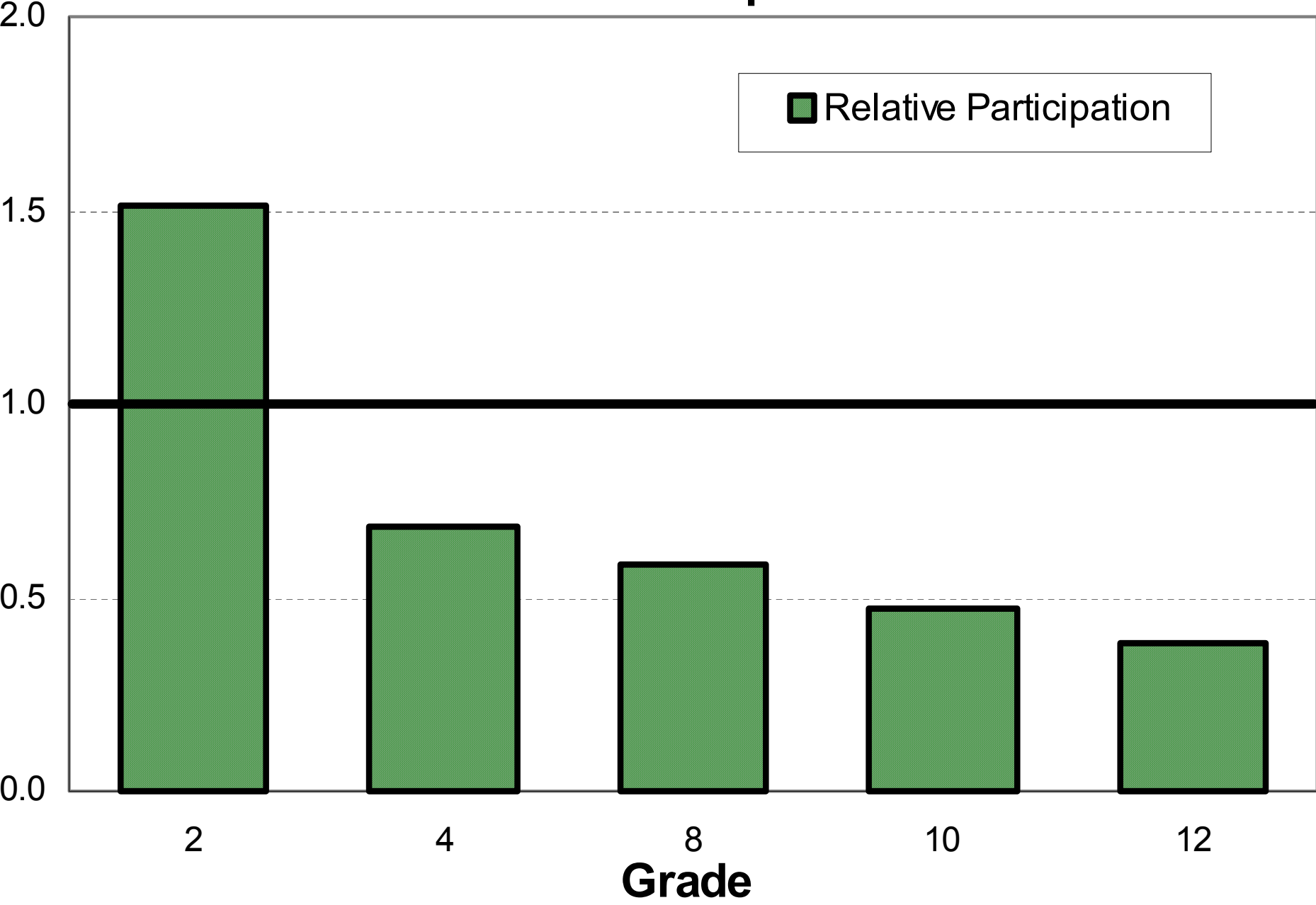
School Participation



School Participation

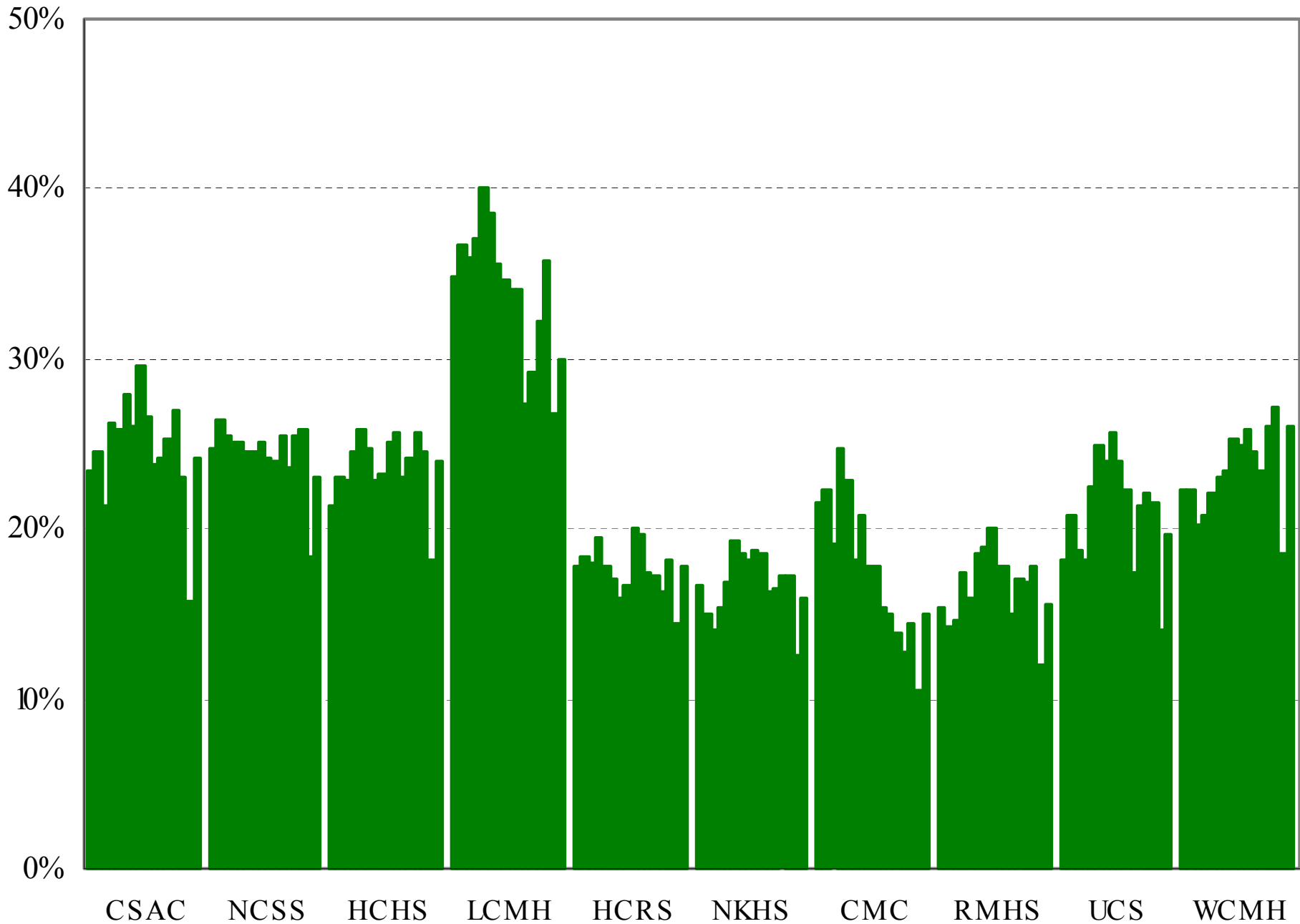


School Participation

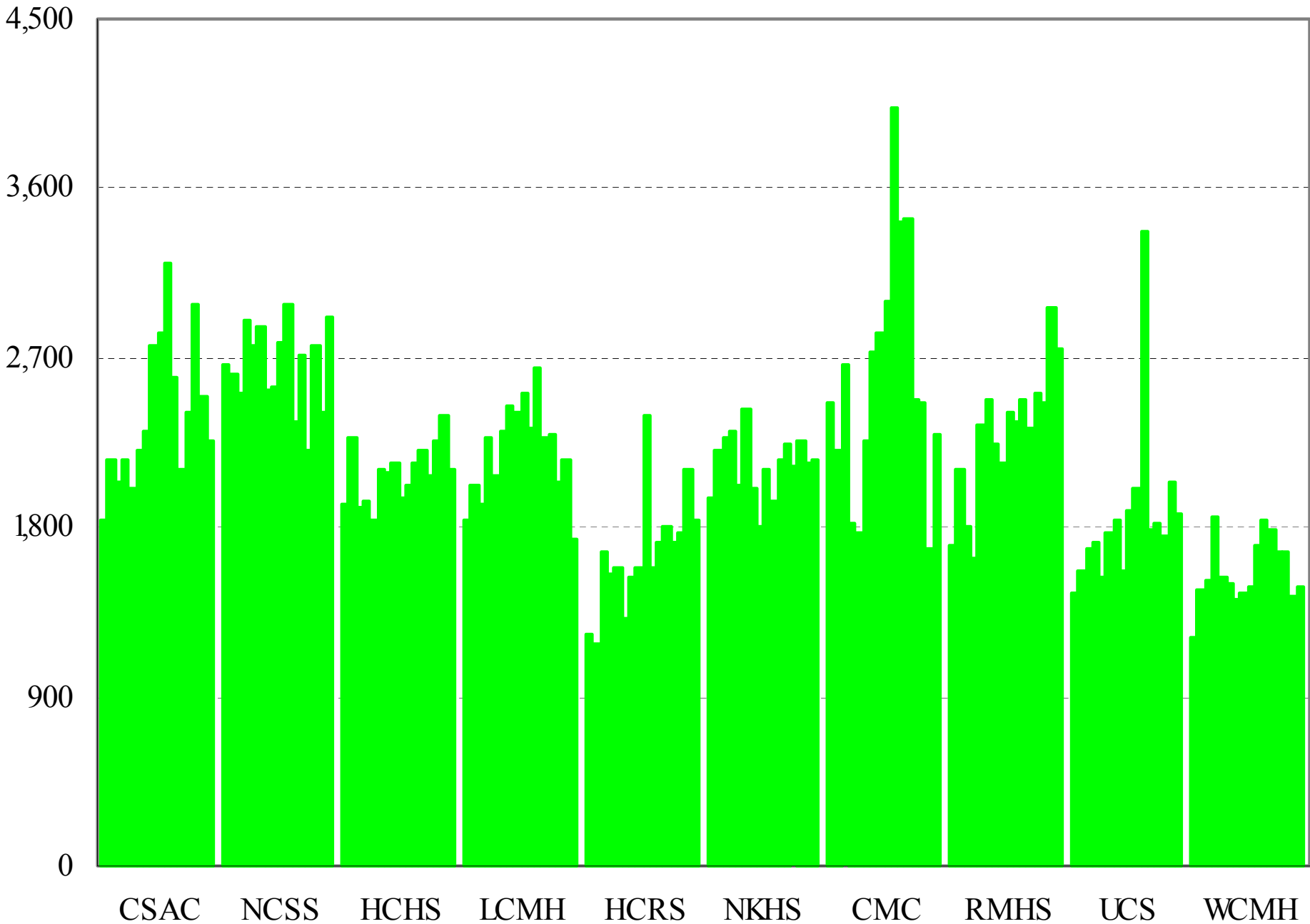


OBJECTIVE

CRT Quarterly Employment Rate: July 1999 - June 2003



CRT Average Quarterly Earnings: July 1999 - June 2003



Income Earned

\$5,080,234

Income Earned

\$5,080,234

Taxes Paid

\$325,495

COST EFFECTIVE

Valid

Detailed

Comprehensive

Objective

How?

GET THE DATA

Interagency Agreements

Memos of Understanding

H.I.P.A.A.

INTEGRATE THE DATA

Direct Linkage

Probabilistic Linkage

Probabilistic

Population Estimation

SAVE

THE DATA

USE

THE DATA