

PERFORMANCE MEASUREMENT AND QUALITY: INTEGRATING PERFORMANCE INDICATORS INTO EVERYDAY PRACTICE

Barbara Estrada, M.S.,

Pam Ihnes, M.S.,

Michael Dennis, Ph.D.

Chestnut Health Systems, Lighthouse Institute, Normal, IL

Presentation at the American Society of Criminology, San Francisco, CA, November 19-22, 2014. Supported by the Reclaiming Futures/Juvenile Drug Court Evaluation under Library of Congress contract no. LCFRD11C0007 to University of Arizona Southwest Institute for Research on Women, Chestnut Health Systems & Carnevale Associates. The views expressed here are the authors and do not necessarily represent the official policies of OJJDP or the Library of Congress; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.



Goals



- Identify and describe common performance and quality measures
- Describe the utility of such measures using examples from JDCRF GAIN data
- Describe practical issues for implementing such measures and using them proactively



Performance and Quality Measures

The Six Aims of High-Quality Health Care

- ❑ **Safe:** Avoiding injuries to patients from the care that is intended to help them.
- ❑ **Effective:** Providing services based on scientific knowledge to all who could benefit.
- ❑ **Patient-centered:** Providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- ❑ **Timely:** Reducing waits and sometimes harmful delays for both those who receive and those who give care.
- ❑ **Efficient:** Avoiding waste, including waste of equipment, supplies, ideas, and energy.
- ❑ **Equitable:** Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

National Research Council. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: The National Academies Press, 2001.

Recommendations Specific to Mental Health and Substance Use

Clinicians and organizations providing mental health and substance use services should:

- Use evidence-based treatments
- Increase their use of valid and reliable patient questionnaires or other patient-assessment instruments that are feasible for routine use to assess the progress and outcomes of treatment systematically and reliably.
- Use measures of the processes and outcomes of care to continuously improve the quality of the care provided.

National Research Council. *Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series*. Washington, DC: The National Academies Press, 2006.

Performance (Timeliness and Effectiveness)*

Data	Measure
A: Number of clients having any contact with the system	
K: Number of clients discharged from initial treatment	
B: Number of clients screened with standardized screening instrument	B/A: % Screened
C: Number of clients assessed by a clinician with a standardized instrument	C/A: % Assessed
D: Number of clients determined to need substance use treatment (e.g., by screener, assessment or clinical judgment)	D/A: % with need
E: Number of clients with index admission (more than 14 days after discharge from the last level of care/prior episode)	E/D: % Index Admission
F: Number clients receiving Evidence-Based Practices/Treatment (EBP)	F/E: % Receiving EBP
G: Number of clients who returned for at least 1 additional treatment session within 14 days of index session (approximated as retention for 15 or more days post intake)	G/E: % Treatment Initiation
H: Number of clients who had 2 additional sessions within 30 days after the date initiation (approximated as retention 6 or more weeks post intake)	H/G: % Treatment Engagement
I: Number of clients with any treatment 90-180 days out (whether due to retention, step up, step down or booster)	I/G: % Treatment Continuing Care
J: Number of clients who received another service within 14 days post discharge from initial level of care	J/K: % Post-Tx Continuity of Care

Effectiveness, Efficiency, and Equity

ASAM Area:	Need based on GAIN at intake	Service Received from GAIN M90 (First 90 days)
Diagnosis (Substance Use, Abuse or Dependence)	Past year AOD problems, weekly use, abuse, or dependence	Initiation of any substance use treatment beyond assessment (including OP, IOP and residential)
Dim 1: Acute Intoxication/Withdrawal Potential	Moderate to high on any withdrawal or opiate intoxication measure	Any Detoxification services (including medication, ambulatory, or inpatient)
Dim 2: Biomedical Complications		medication, emergency
Dim 3: Emotional/Cognitive Complications		medication, emergency
Dim 4: Readiness		weeks post intake
Dim 5: Relapse Continued Problem		
Dim 6: Recovery/Living Environment	Moderate to high environment problems such as homelessness , AOD use in home, AOD use in formal activities, trouble or arguments at home or attached, abused sexually, mentally or physically or involved in criminal activity while AOD use	Any self-help group attendance

Efficiency and Effectiveness

% Need = # in need / # admitted

% Receiving Service = # received services by fu / # admitted

% Untargeted Svcs = # low or no need / # receiving services

% Unmet Need = no services by fu / # moderate to high need

Equity

Efficiency and Effectiveness by age, race and gender

Outcomes

Outcome Domain:	Severity based on GAIN at intake	Severity based on GAIN at follow-up
Substance Use	Past Month Substance Problems	Past Month Substance Problems
Substance Use	Past 90 Day Substance Frequency	Past 90 Day Substance Frequency
Dim 1: Acute Withdrawal		
Dim 2: Biomedical Complication		
Dim 3: Emotional/Cognitive Complication		
Dim 3: Emotional/Cognitive Complication		
Dim 4: Readiness		
Dim 5: Relapse/Continued Problem Potential		
Dim 6: Recovery/Living Environment		

Outcomes

Percent change in FU measure = % at FU minus % at intake

OR

Relative percent change in FU measure = (% at FU - % at intake) / % at intake



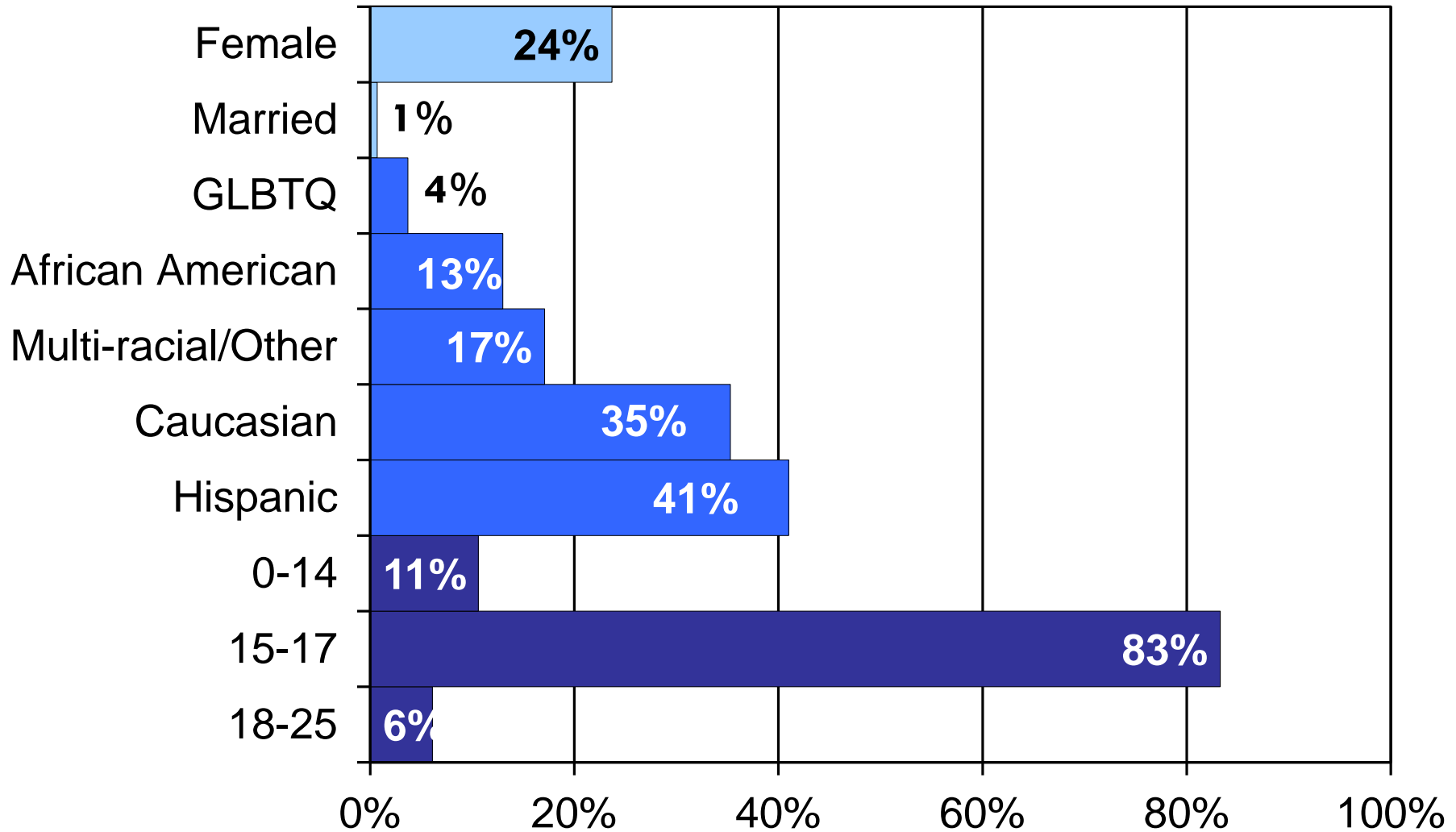
Examples from JDCRF Data

Reclaiming Futures RF-JTDC Sites & Data

- Cohort of 8 Reclaiming Futures (RF)/Center for Substance Abuse Treatment (CSAT) collaboration grantee sites using the GAIN.
- Intake data collected on 738 adolescents from these sites between January 2008 through June 2014
- Follow-up data was available for 611 (89% of 688 due) adolescents with 1+ follow-up at 3, 6, and 12-months post intake.

Demographic Characteristics

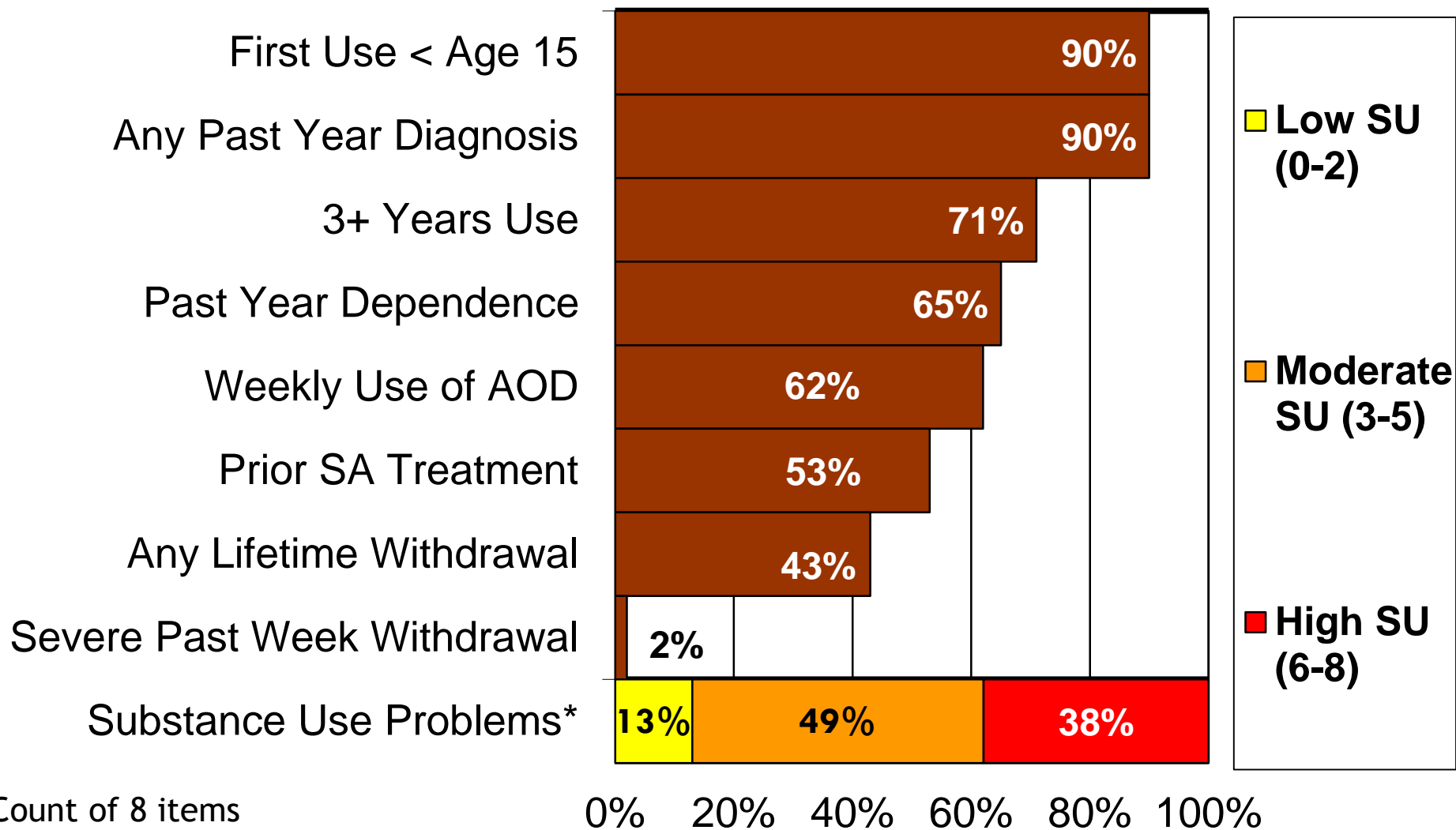
11



*Any Hispanic ethnicity separate from race group

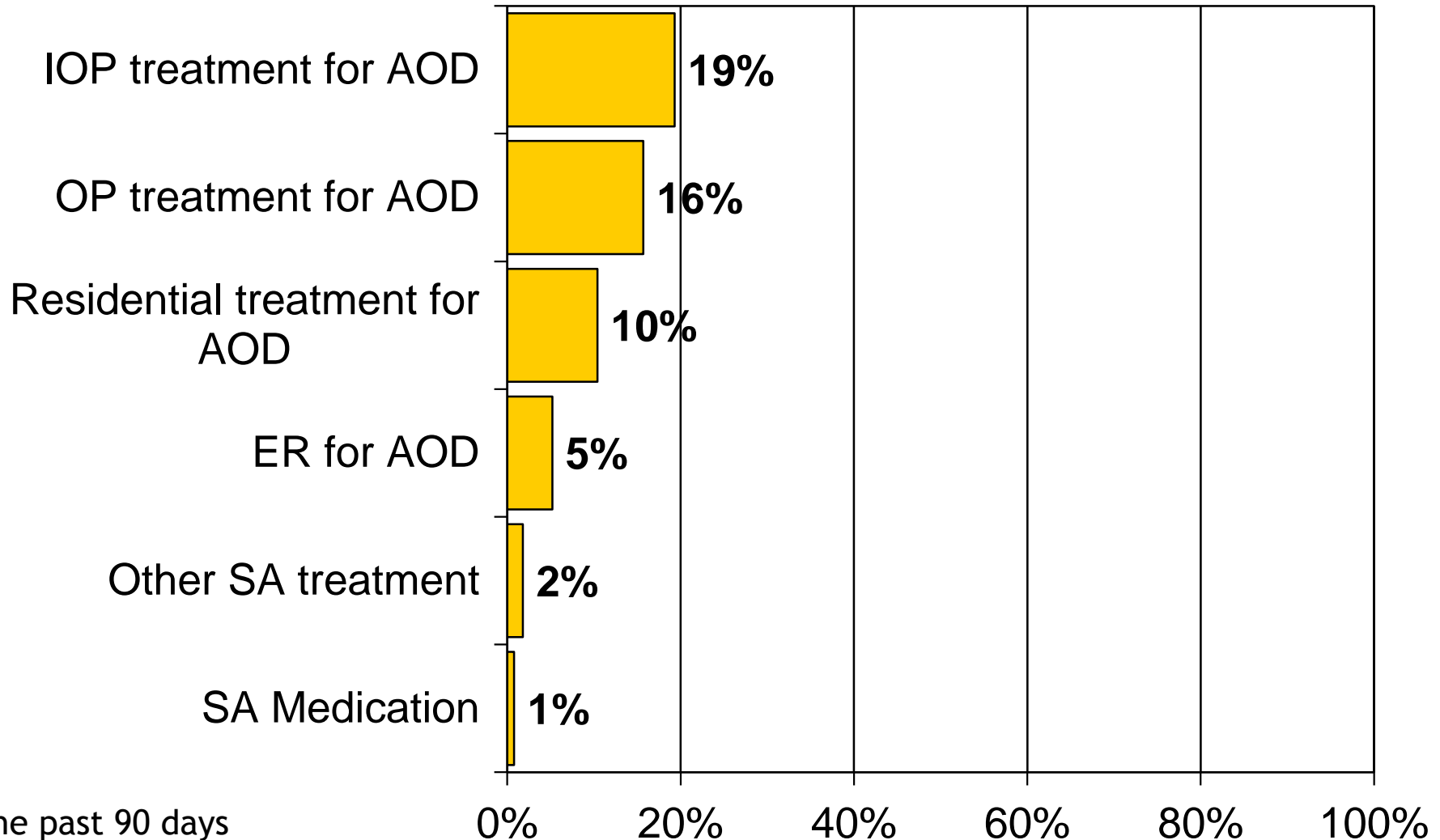
ASAM A. Diagnosis - Problems

12



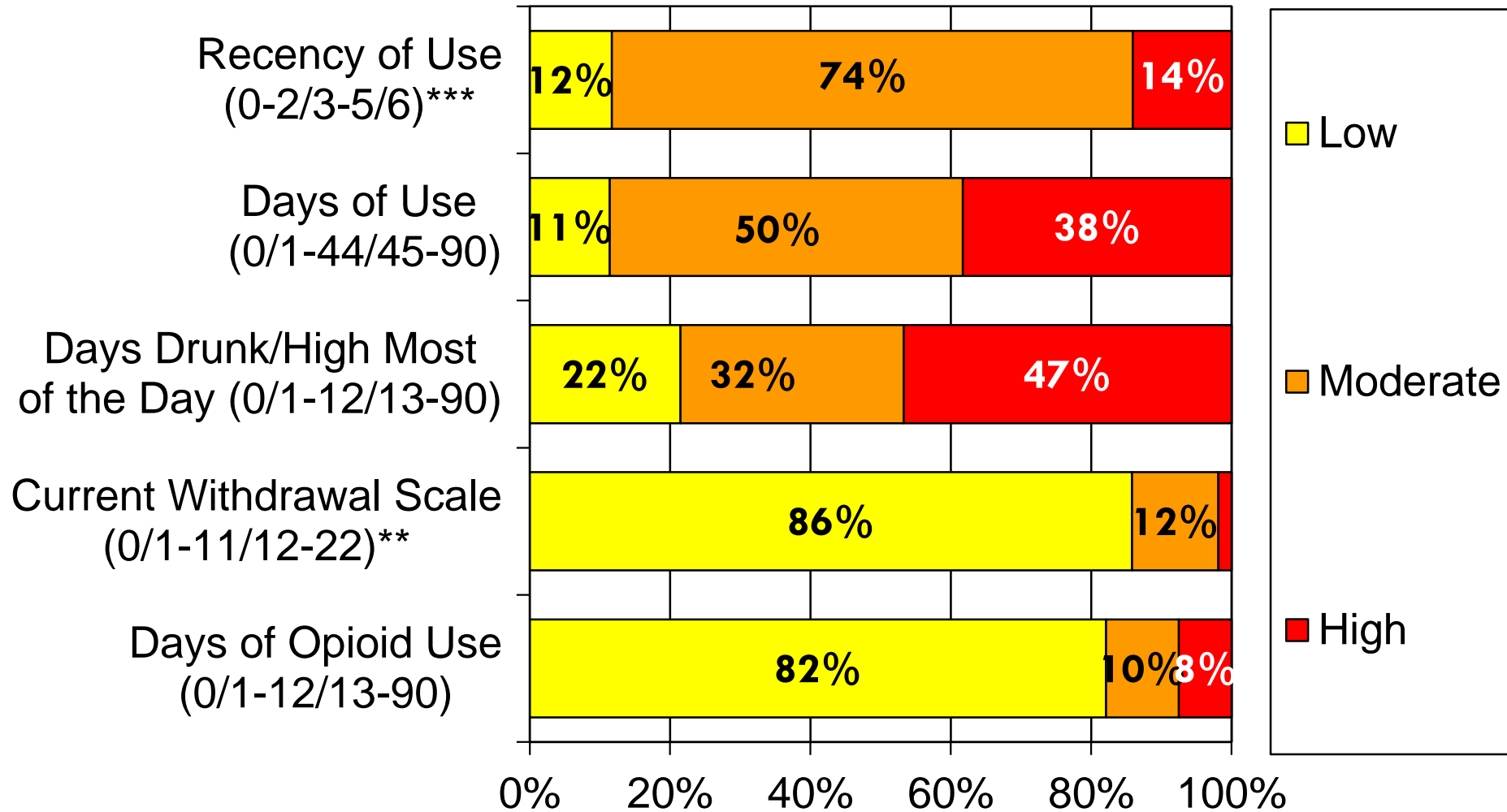
ASAM A. Diagnosis Services*

13



ASAM B1. Acute Intoxication/ Withdrawal – Problems*

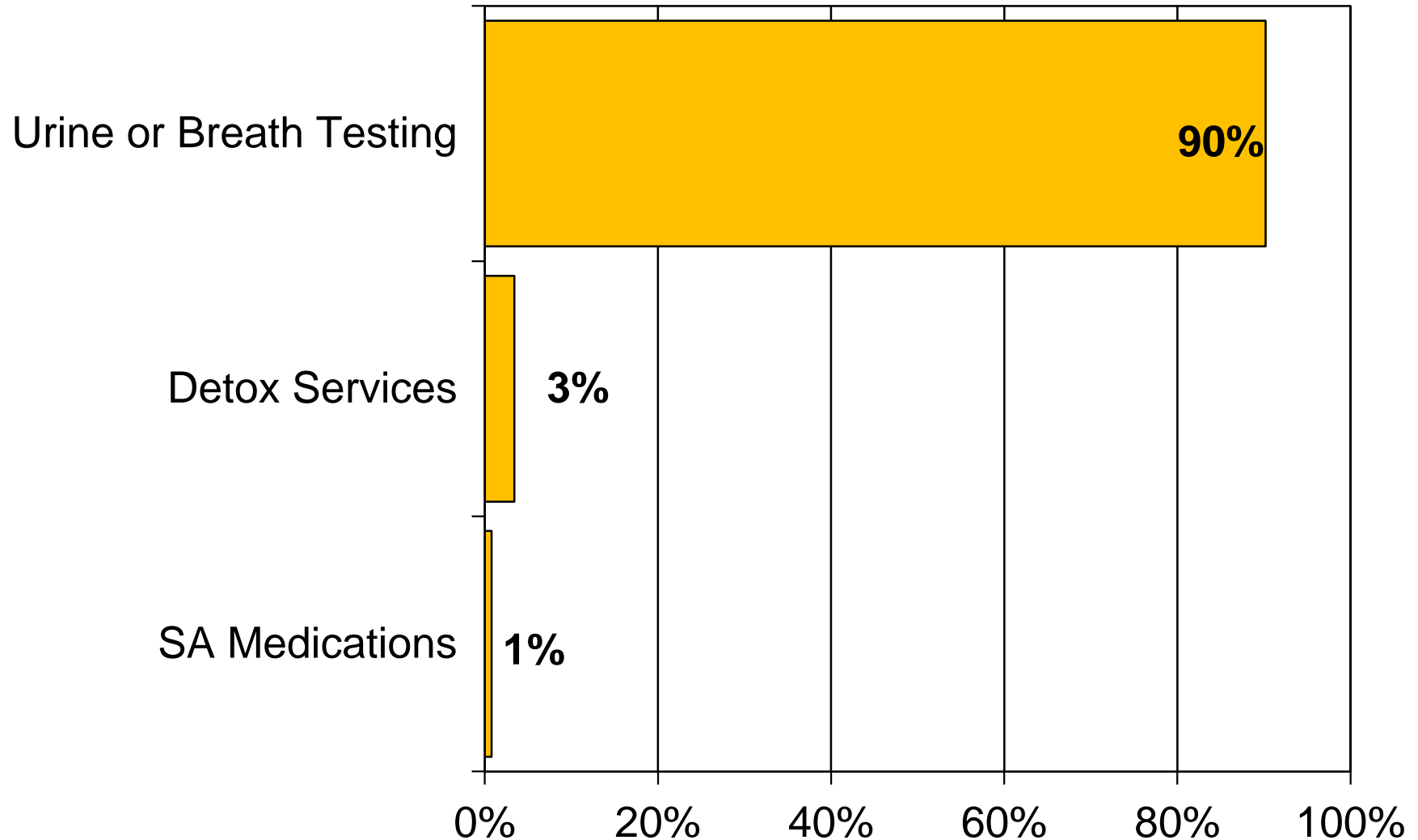
14



*Past 90 days **Past week ***Lifetime

ASAM B1. Detox/Withdrawal Services

15



ASAM B2. Biomedical – Health Problems*

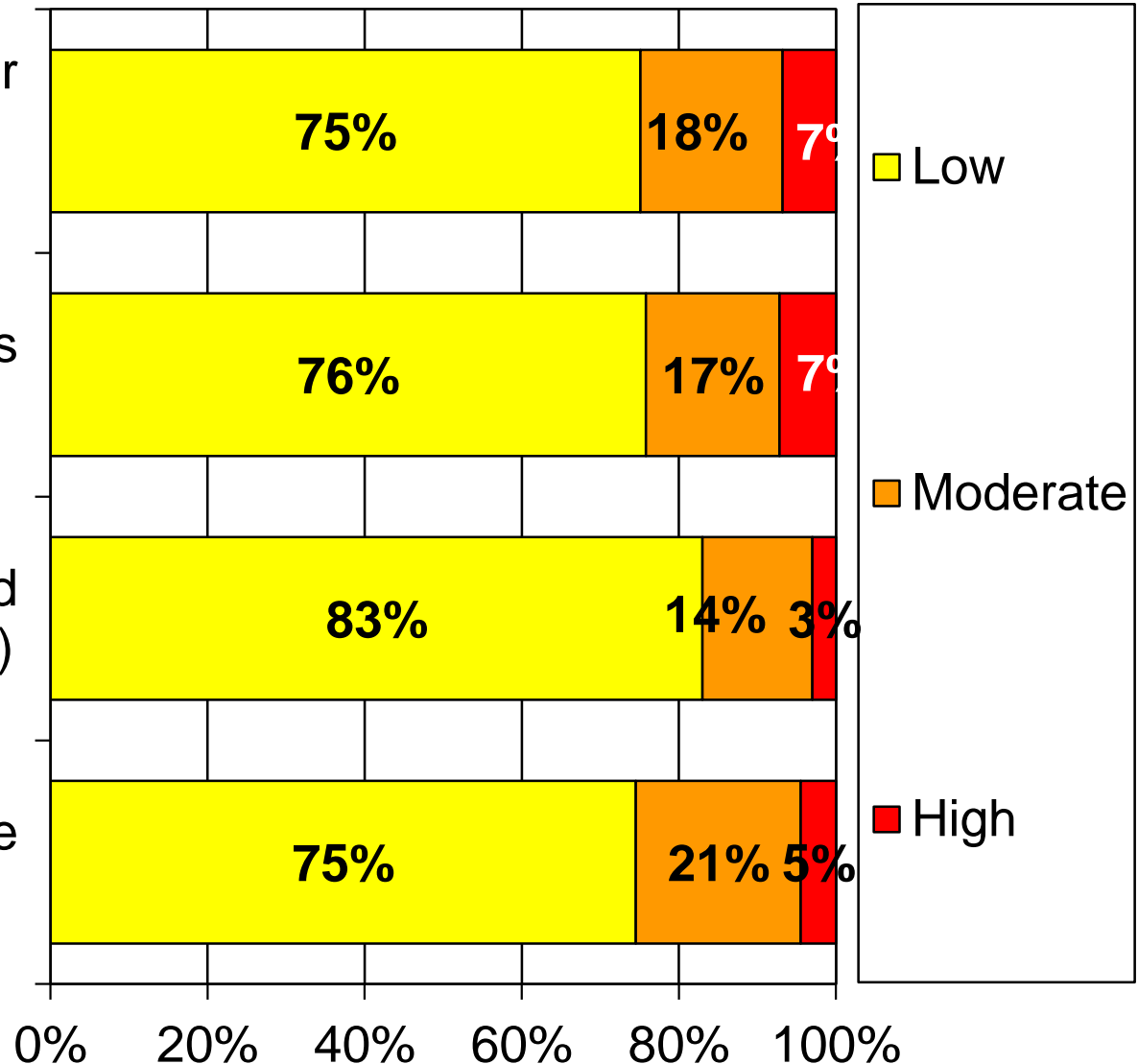
16

Recency of PH Problems or
PH Caused Role Failure
(0-2/3-4/5-6)**

Days of PH Problems
(0/1-12/13-90)

Days PH Problems Caused
Role Failure (0/1-12/13-90)

Health Distress Scale
(0-2/3-6/7-14)***



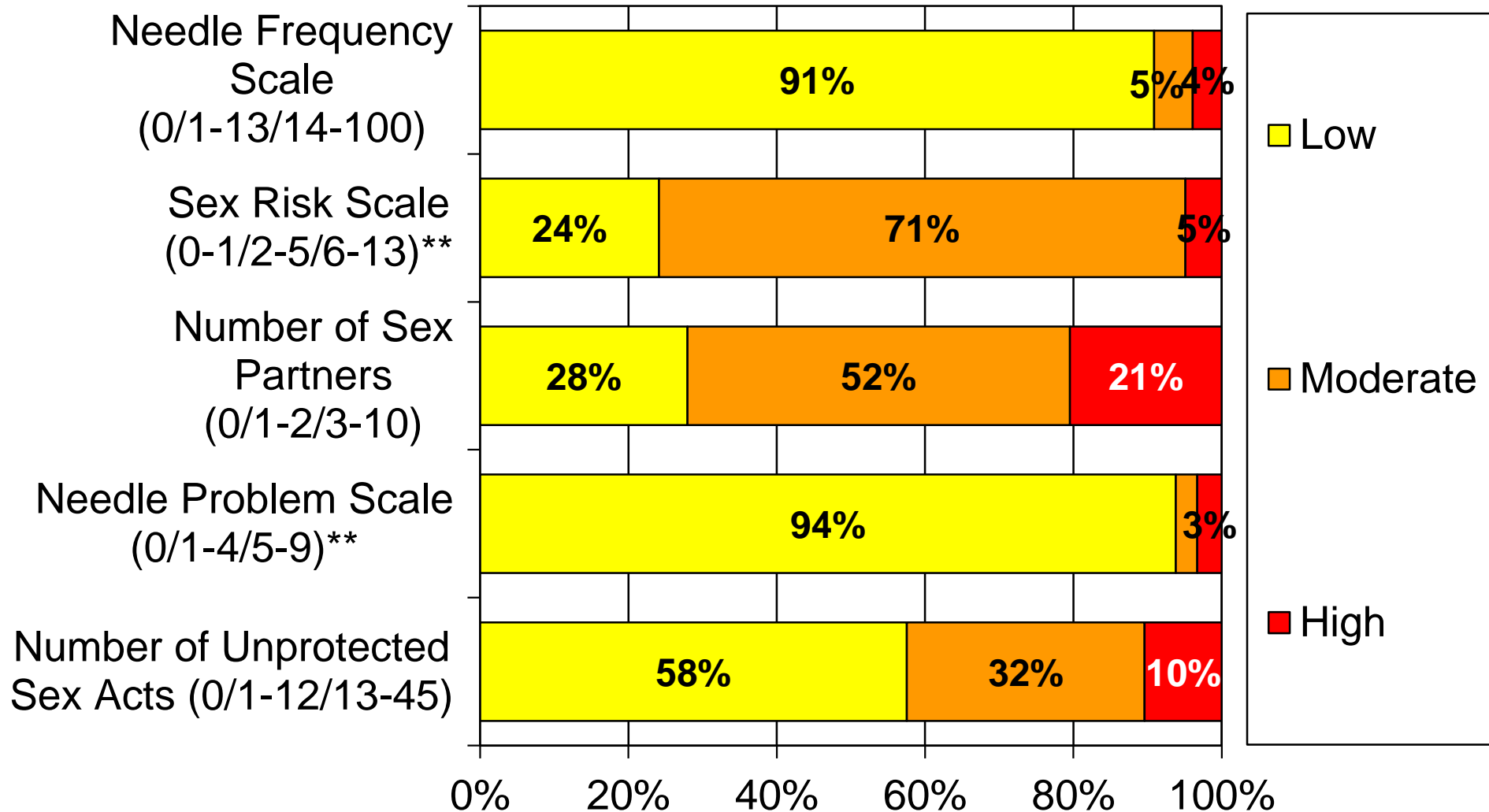
*Past 90 days

**Lifetime

***Past year

ASAM B2. Biomedical – HIV Risk Problems*

17

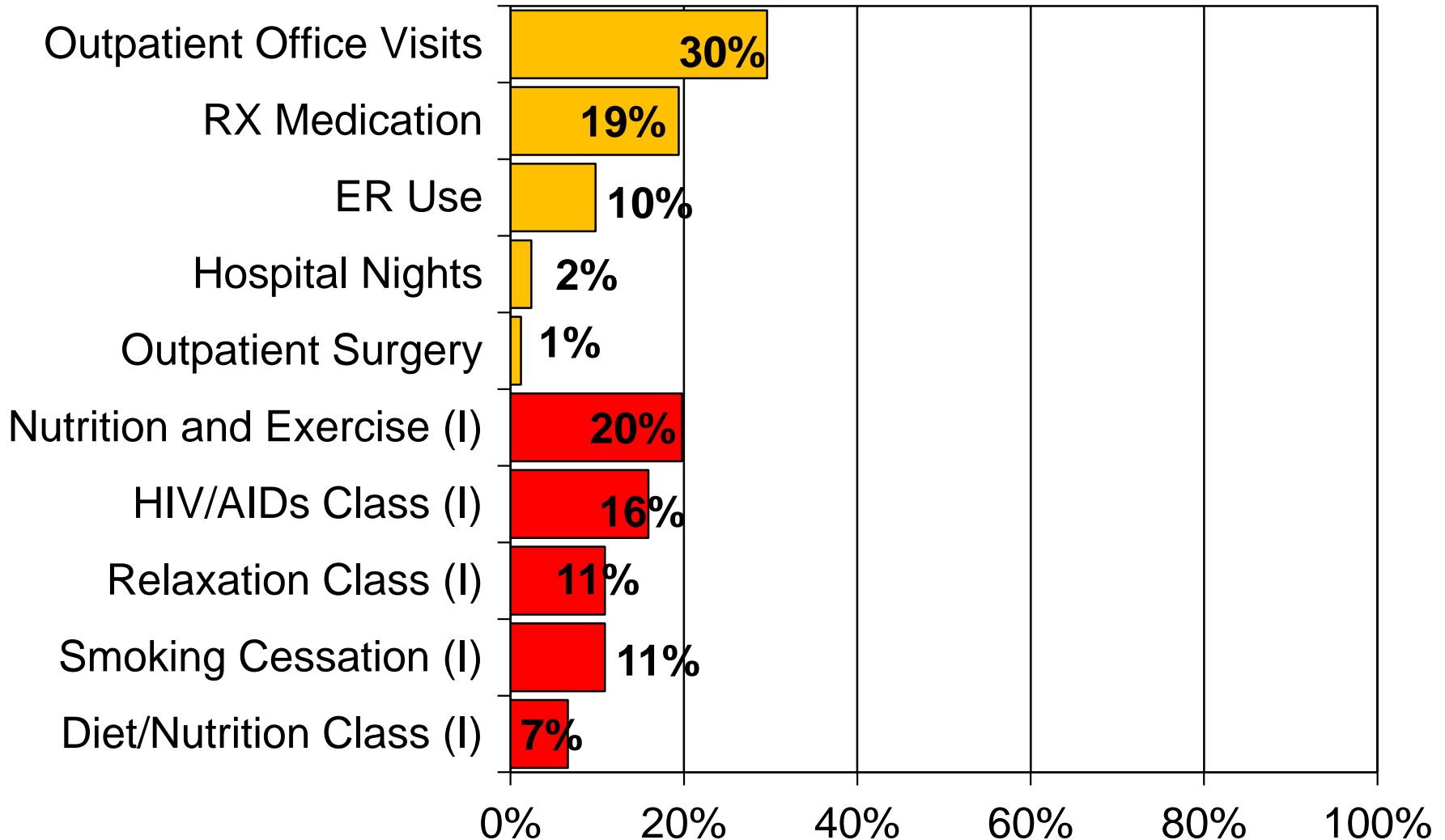


*Past 90 days

**Past Year

ASAM B2. Biomedical – Services*

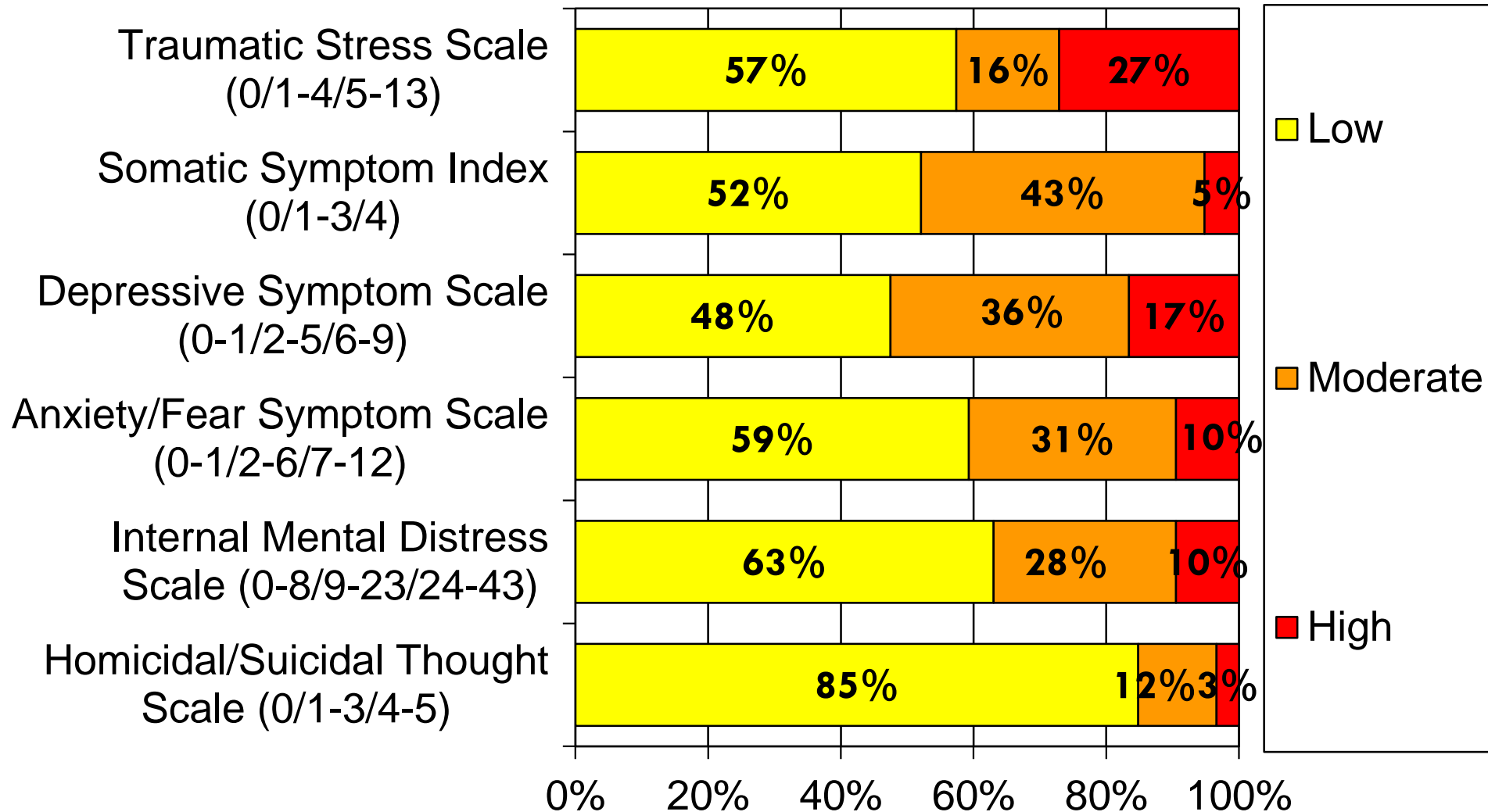
18



*Past 90 days

ASAM B3. Psychological/Behavioral – Internalizing Disorder Problems*

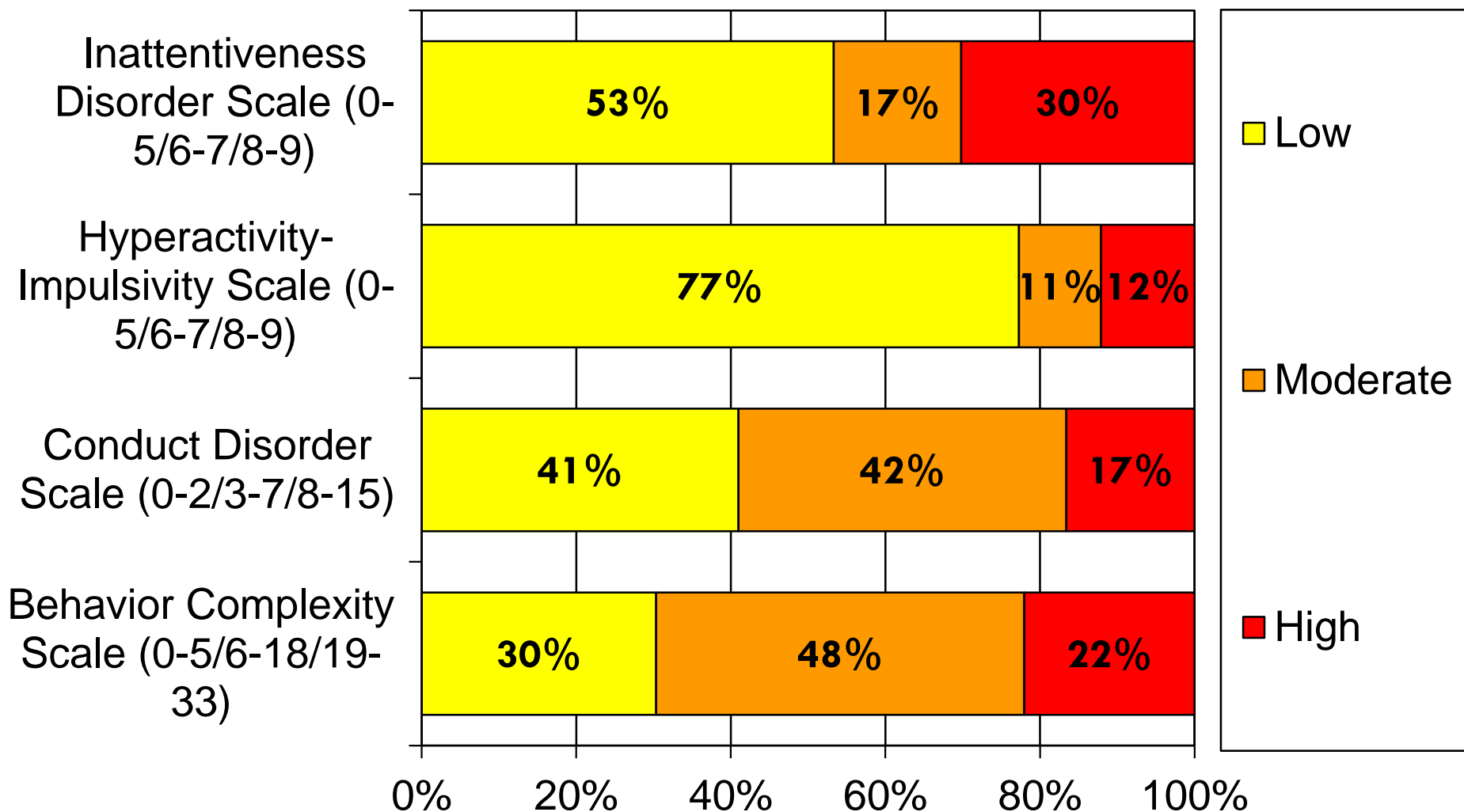
19



*Past year

ASAM B3. Psychological/Behavioral – Externalizing Disorder Problems*

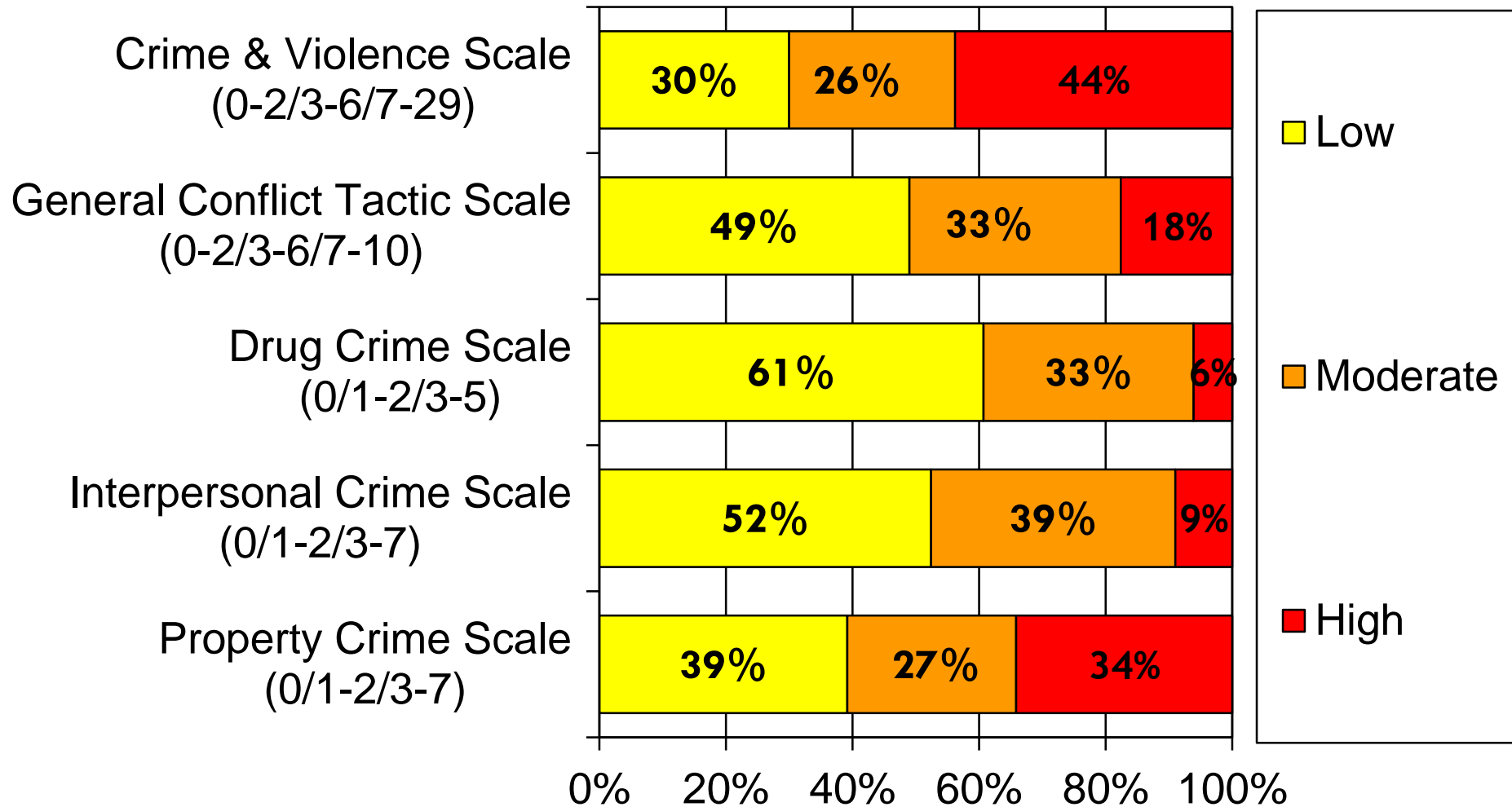
20



*Past year

ASAM B3. Psychological/Behavioral – Crime & Violence Problems*

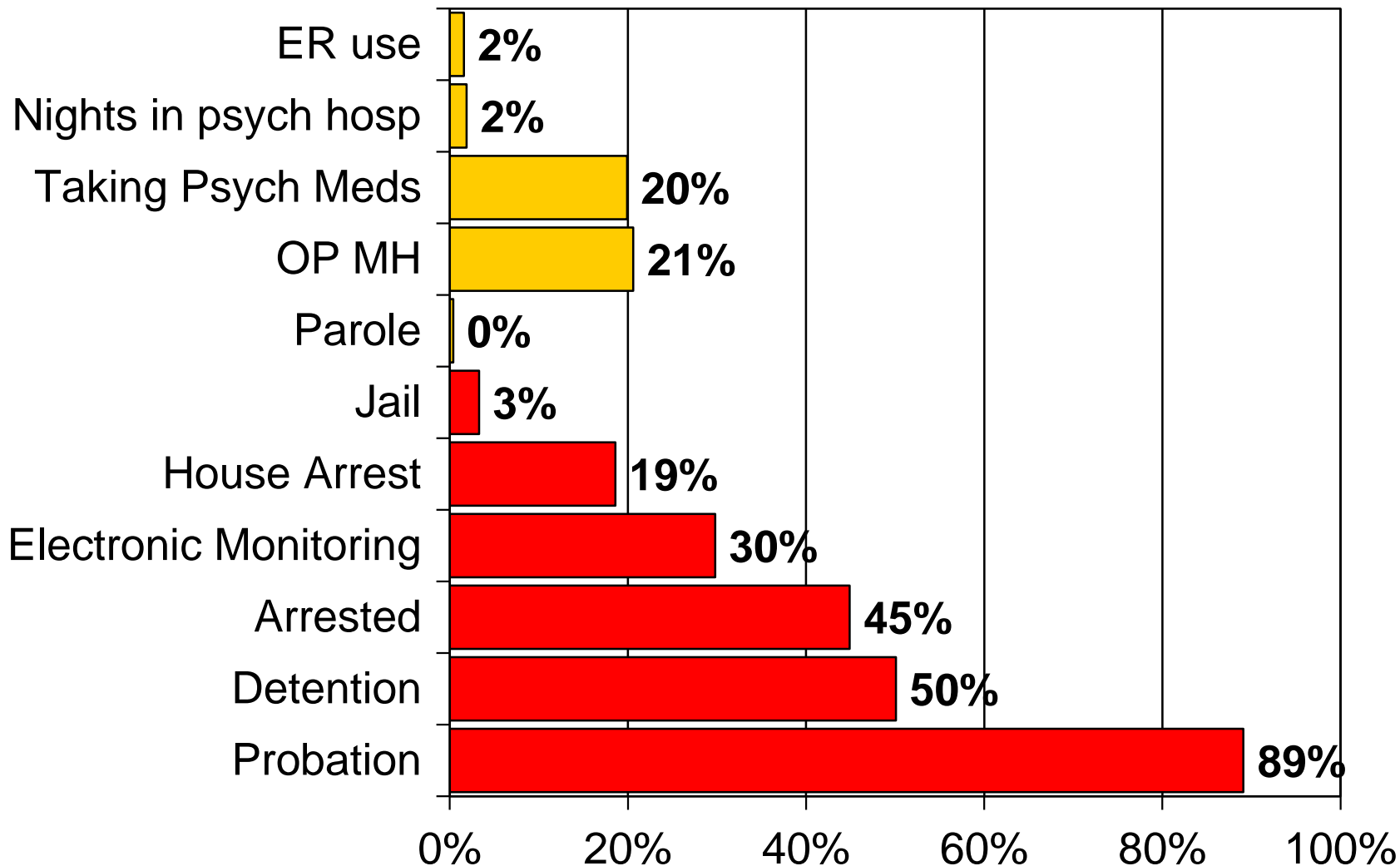
21



*Past year

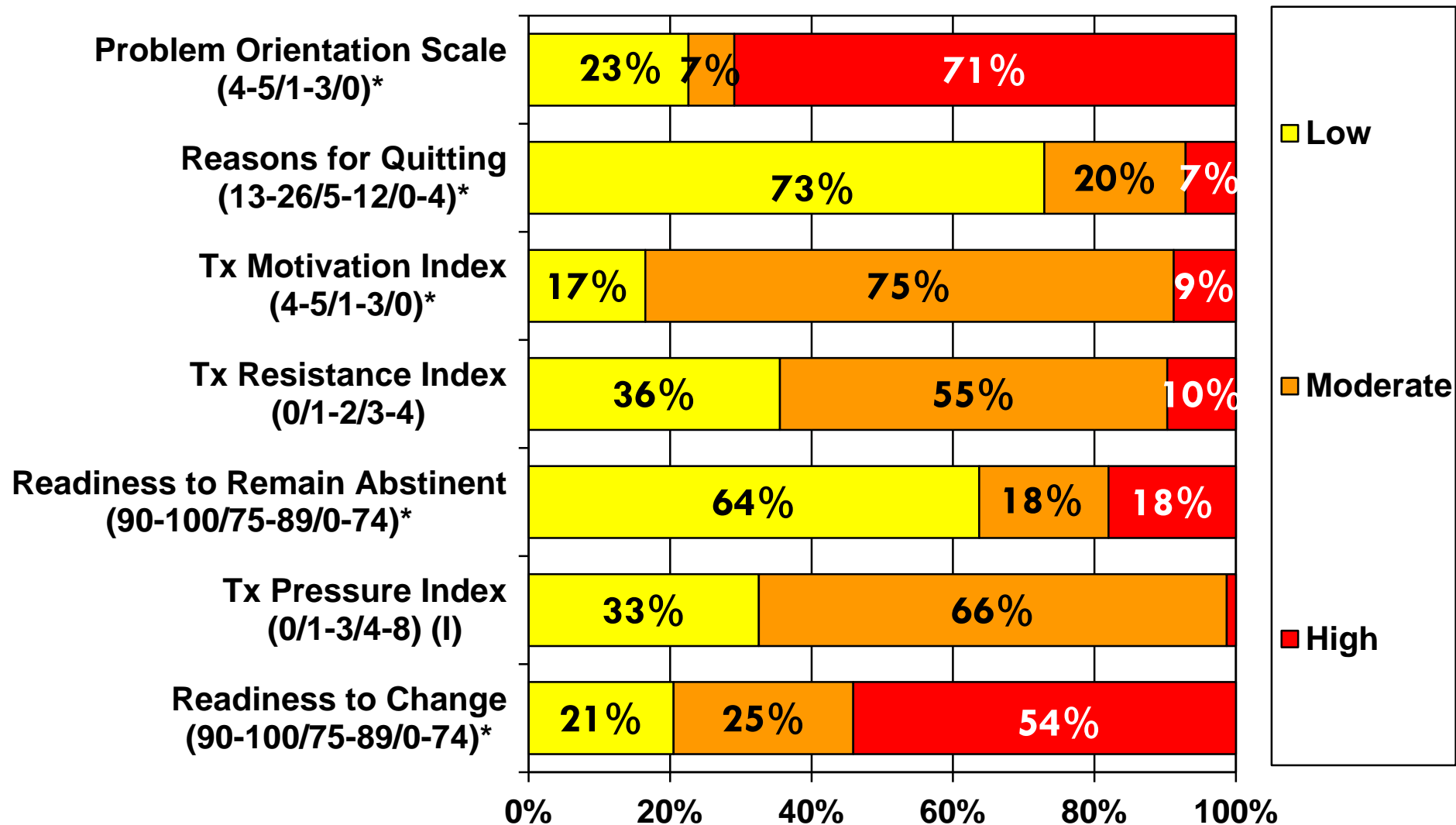
ASAM B3. Psychological/Behavioral Health Services

22



ASAM B4. Readiness to Change - Problems

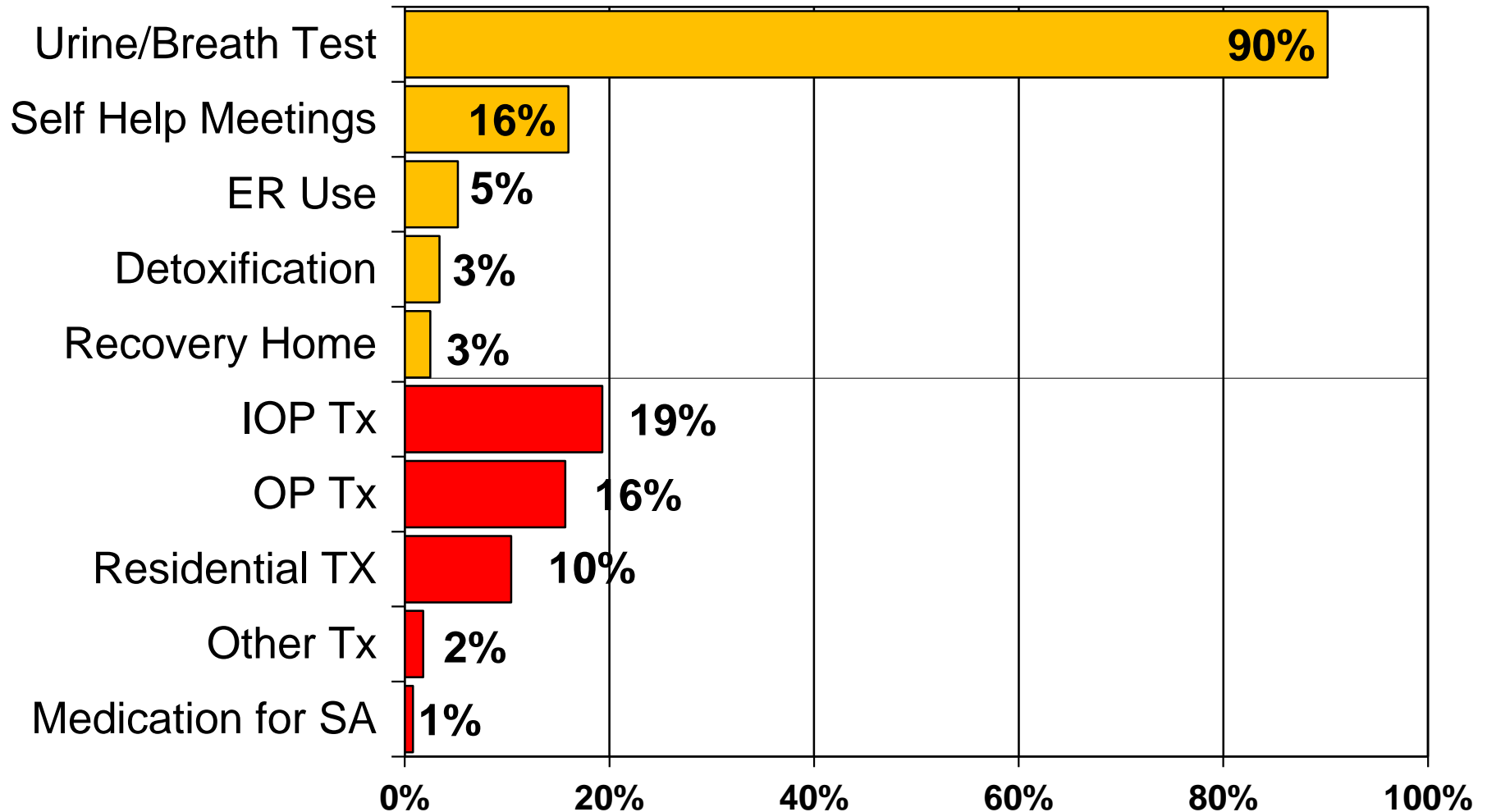
23



* Scores are reversed to reflect that low scores are of high clinical severity.

ASAM B4. Treatment Readiness and B5. Relapse Potential – Services*

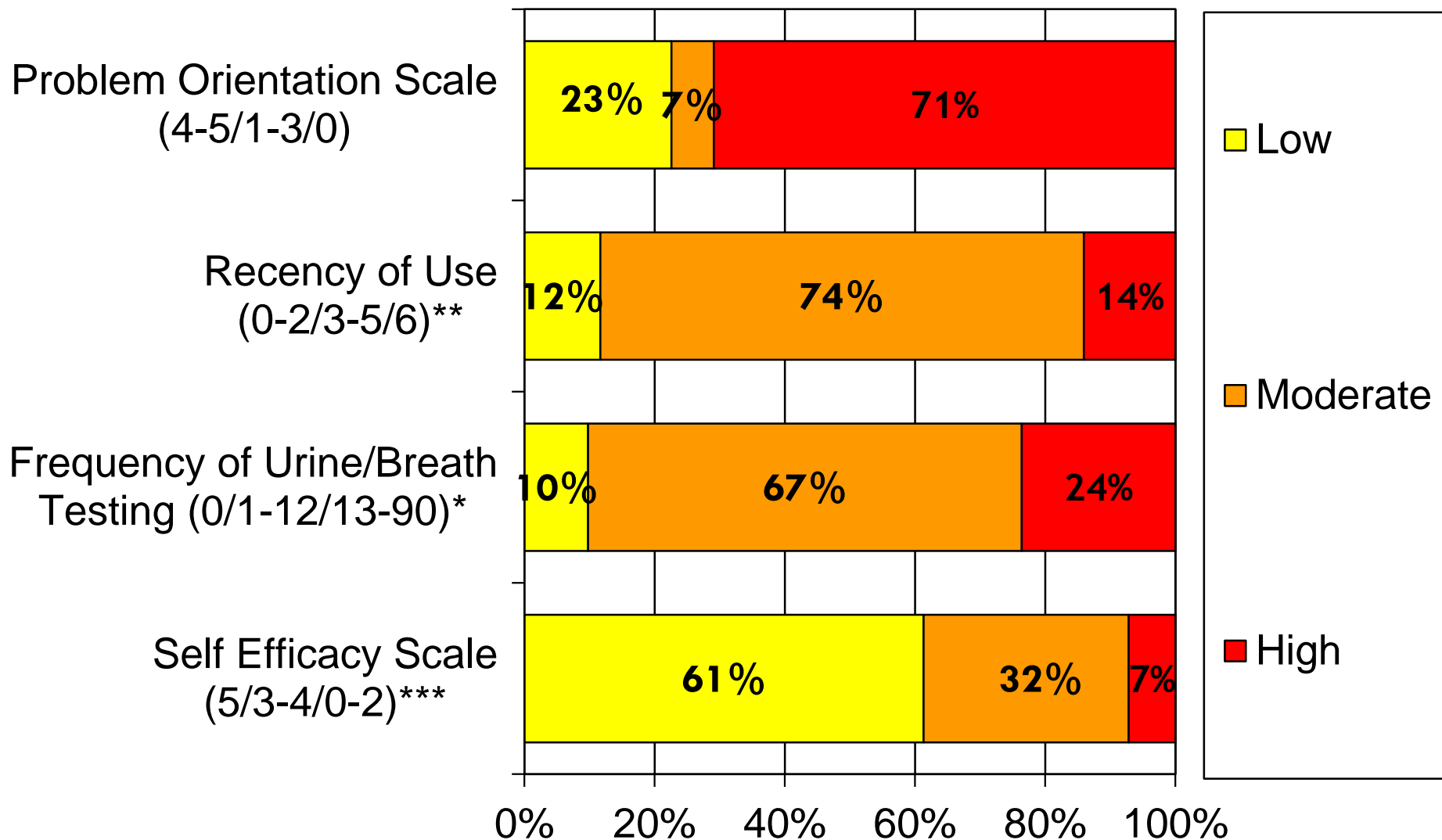
24



* Past 90 days.

ASAM B5. Relapse Potential - Problems

25



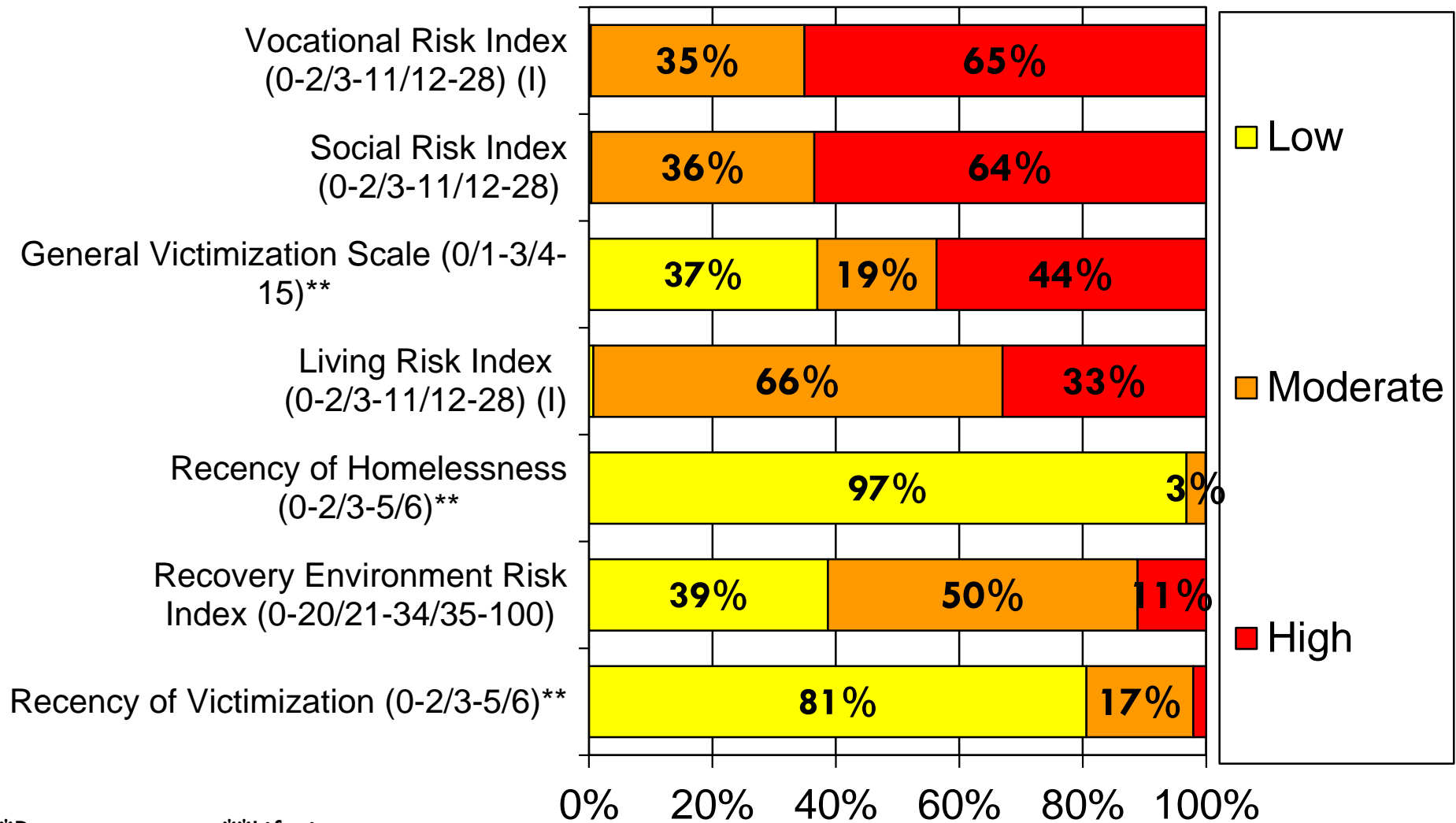
* Past 90 days

**Lifetime

** Scores are reversed to reflect that low scores are of high clinical severity.

ASAM B6. Recovery Environment – Environmental Risk Problems*

26

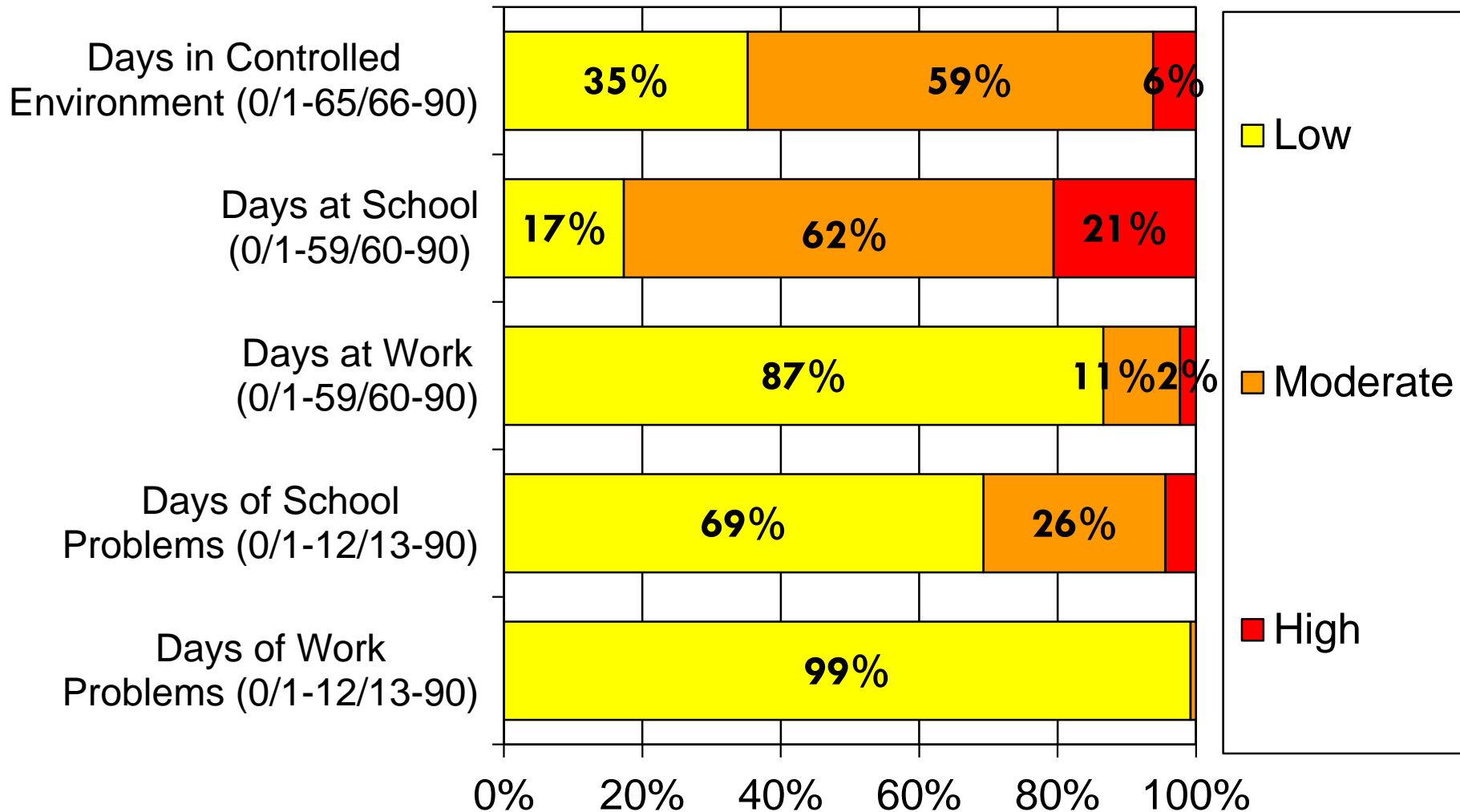


*Past year

**Lifetime

ASAM B6. Recovery Environment – School and Work Problems*

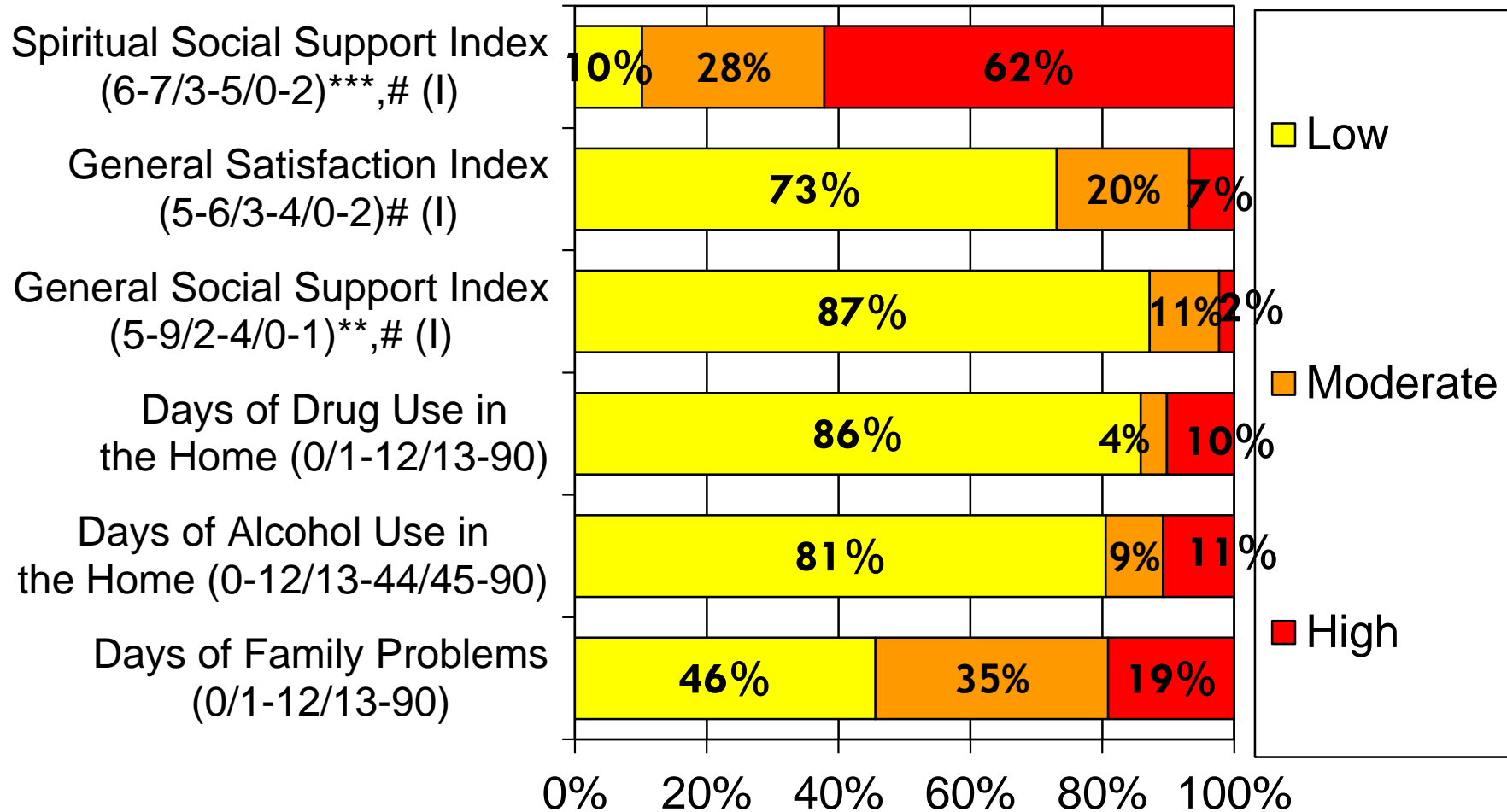
27



*Past 90 days

ASAM B6. Recovery Environment – Support Problems*

28

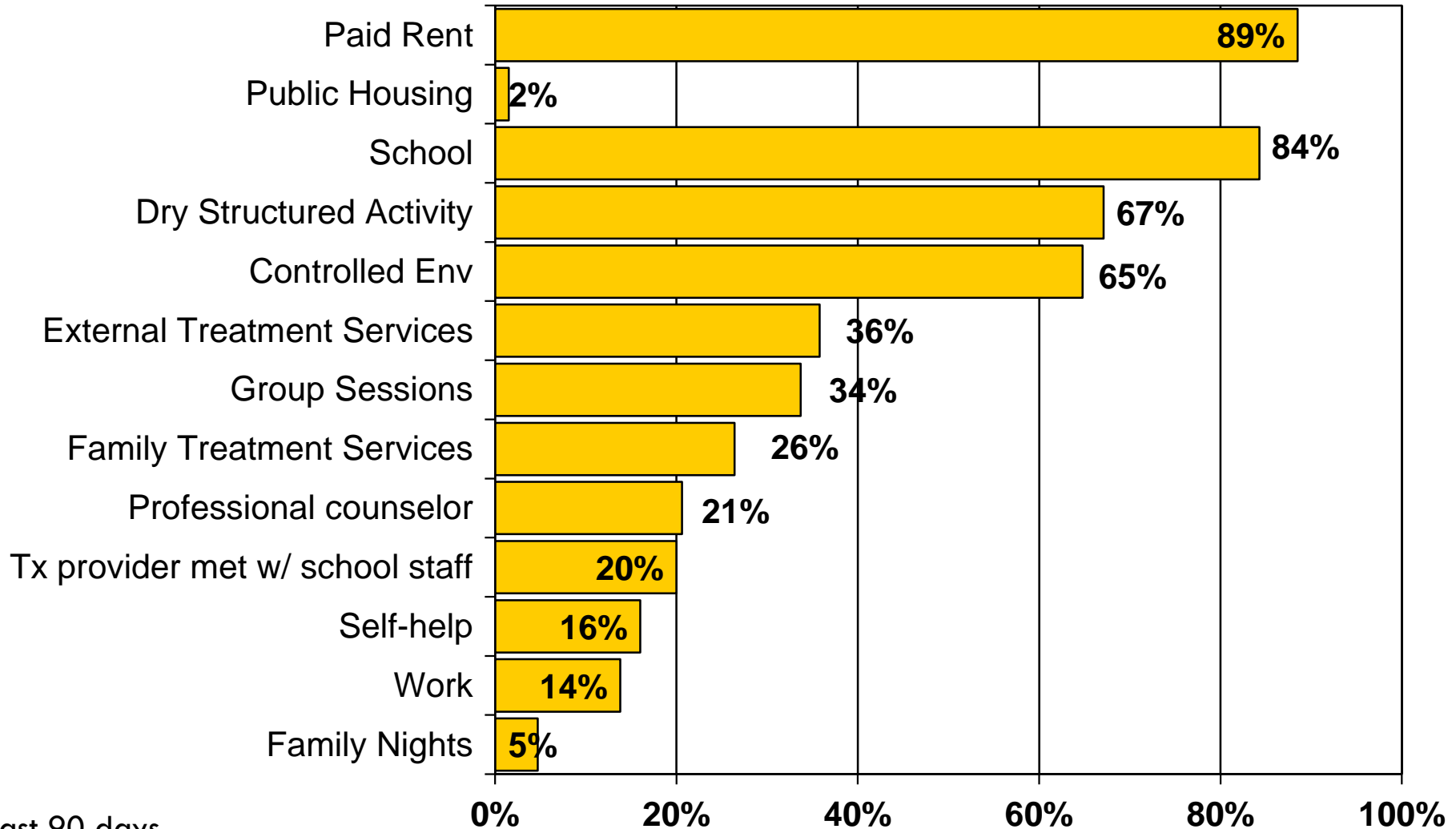


*Past 90 days **Past Year ***Current

#Scores are reversed to reflect that low scores are of high clinical severity.

ASAM B6. Recovery Environment – Services*

29



* Past 90 days.

Performance (Timeliness and Effectiveness)

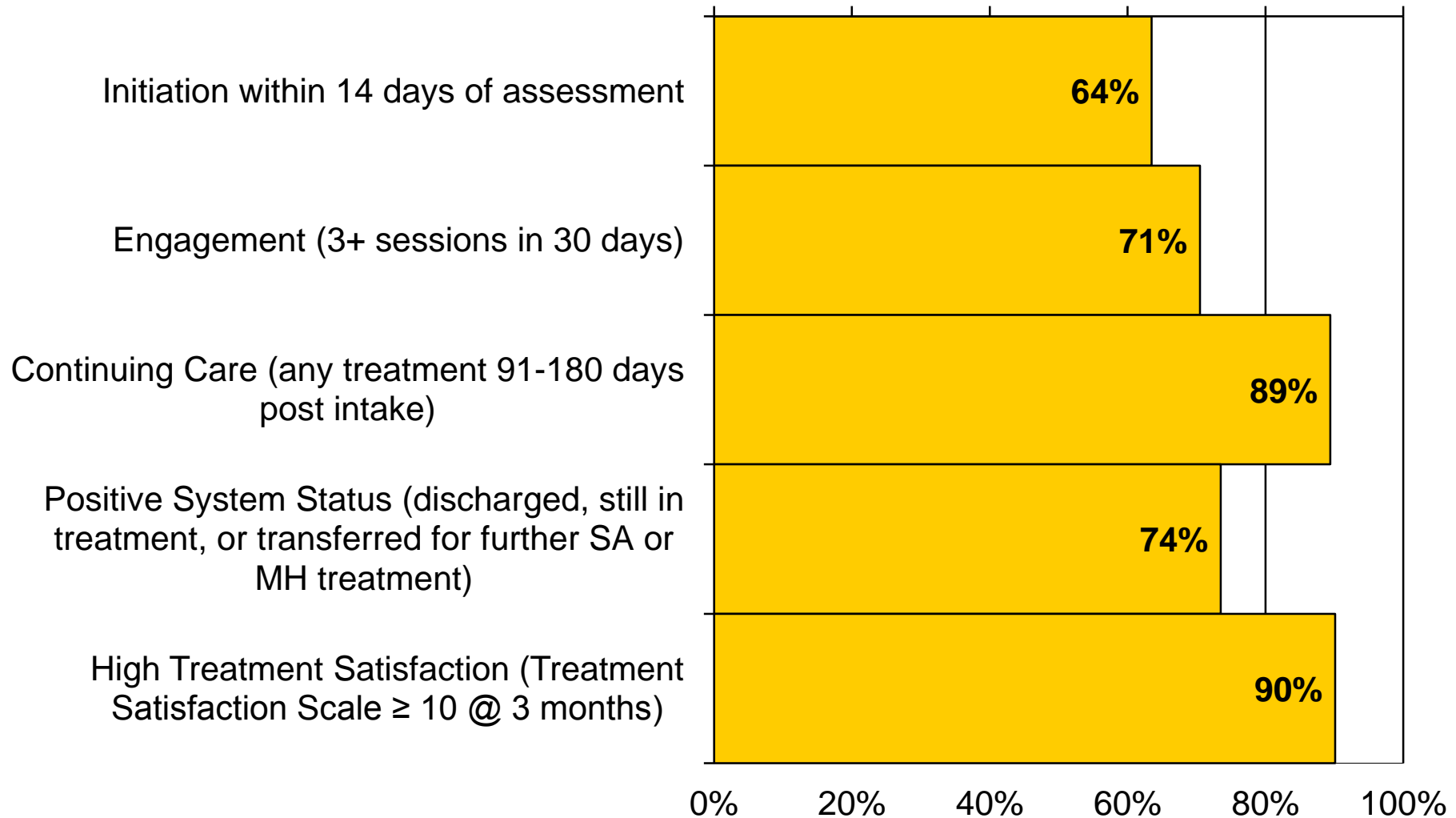
Data	Measure
A: Number of clients having any contact with the system	
K: Number of clients discharged from the system	
B: Number of clients screened with service logs	B/A: % Screened
C: Number of clients assessed by a clinician	C/A: % Assessed
D: Number of clients determined to need services (by screener, assessment or clinical judgment)	D/A: % with need
E: Number of clients with index admission (more than 14 days after discharge from the last level of care/prior episode)	E/D: % Index Admission
F: Number clients receiving Evidence-Based Practices/Treatment (EBP)	F/E: % Receiving EBP
G: Number of clients who returned for treatment within 14 days of index session (approximated as date of intake)	G/E: % Treatment Initiation
H: Number of clients who had 2 additional sessions within 14 days of the date of initiation (approximated as retention)	H/G: % Treatment Engagement
I: Number of clients with any treatment within 14 days of retention, step up, step down or booster)	I/G: % Treatment Continuing Care
J: Number of clients who received another service within 14 days post discharge from initial level of care	J/K: % Post-Tx Continuity of Care

Requires service logs

Simple to count or measure

Performance Measurement (of those with 1+ follow-up)

31



Effectiveness and Efficiency

32

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)	99% 538/541	78% 421/541	0.2% 1/421	22% 118/538
Dim 1: Acute Intoxication/ Withdrawal Potential	14% 73/535	3% 14/535	50% 7/14	90% 66/73
Dim 2: Biomedical Conditions or Complications	39% 215/547	37% 203/547	49% 100/203	52% 112/215
Dim 2: HIV Risk Behaviors	74% 301/408	33% 134/408	28% 38/134	68% 205/301
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	74% 409/552	31% 172/552	16% 28/172	65% 265/409
Dim 3: Crime and Violence	75% 411/551	96% 527/551	25% 133/527	4% 17/411
Dim 4: Readiness to Change	88% 455/517	83% 429/517	12% 53/429	17% 79/455
Dim 5: Relapse Continued Use or Continued Problems	90% 489/545	98% 534/545	10% 55/534	2% 10/489
Dim 6: Recovery/Living Environment	100% 546/546	99% 542/546	0% 0/542	1% 4/546
Dim 6: Social Support	99% 541/548	92% 504/548	1% 7/504	8% 44/541
Dim 6: School/Work	62% 331/531	86% 459/531	34% 156/459	9% 28/331

Effectiveness and Efficiency

33

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)	99% 538/541	78% 421/541	.2% 1/421	22% 118/538
Dim 1: Acute Intoxication/ Withdrawal Potential	14% 73/535	3% 14/535	50% 7/14	90% 66/73
Dim 2: Biomedical Conditions or Complications	39% 215/547	37% 203/547	49% 100/203	52% 112/215
Dim 2: HIV Risk Behaviors	74% 301/408	33% 134/408	28% 38/134	68% 205/301
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	74% 409/552	31% 172/552	16% 28/172	65% 265/409
Dim 3: Crime and Violence	75% 411/551	96% 527/551	25% 133/527	4% 17/411
Dim 4: Readiness to Change	88% 455/517	83% 429/517	12% 53/429	17% 79/455
Dim 5: Relapse Continued Use or Continued Problems	90% 489/545	98% 534/545	10% 55/534	2% 10/489
Dim 6: Recovery/Living Environment	100% 546/546	99% 542/546	0% 0/542	1% 4/546
Dim 6: Social Support	99% 541/548	92% 504/548	1% 7/504	8% 44/541
Dim 6: School/Work	62% 331/531	86% 459/531	34% 156/459	9% 28/331

Highlighted any percentage that impacted over 33% of relevant group

Equity - Gender

34

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)		↑ Females		↑ Males
Dim 1: Acute Intoxication/ Withdrawal Potential				
Dim 2: Biomedical Conditions or Complications	↑ Females	↑ Females		↑ Males
Dim 2: HIV Risk Behaviors				
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	↑ Females	↑ Females	↑ Males	↑ Males
Dim 3: Crime and Violence	↑ Females			↑ Males
Dim 4: Readiness to Change	↑ Females			
Dim 5: Relapse Continued Use or Continued Problems	↑ Females			
Dim 6: Recovery/Living Environment				
Dim 6: Social Support		↑ Females		↑ Males
Dim 6: School/Work				

Equity - Ethnicity

35

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)		↓ African American		↑ African American
Dim 1: Acute Intoxication/ Withdrawal Potential		↑ White		
Dim 2: Biomedical Conditions or Complications	↓ African American	↑ Other ↓ African American		
Dim 2: HIV Risk Behaviors				
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	↓ African American	↓ African American	↑ African American ↑ Hispanic	↑ African American
Dim 3: Crime and Violence		↓ African American		
Dim 4: Readiness to Change				
Dim 5: Relapse Continued Use or Continued Problems				
Dim 6: Recovery/Living Environment		↓ African American ↓ Multi-racial		↑ African American
Dim 6: Social Support				
Dim 6: School/Work				

Equity - Age

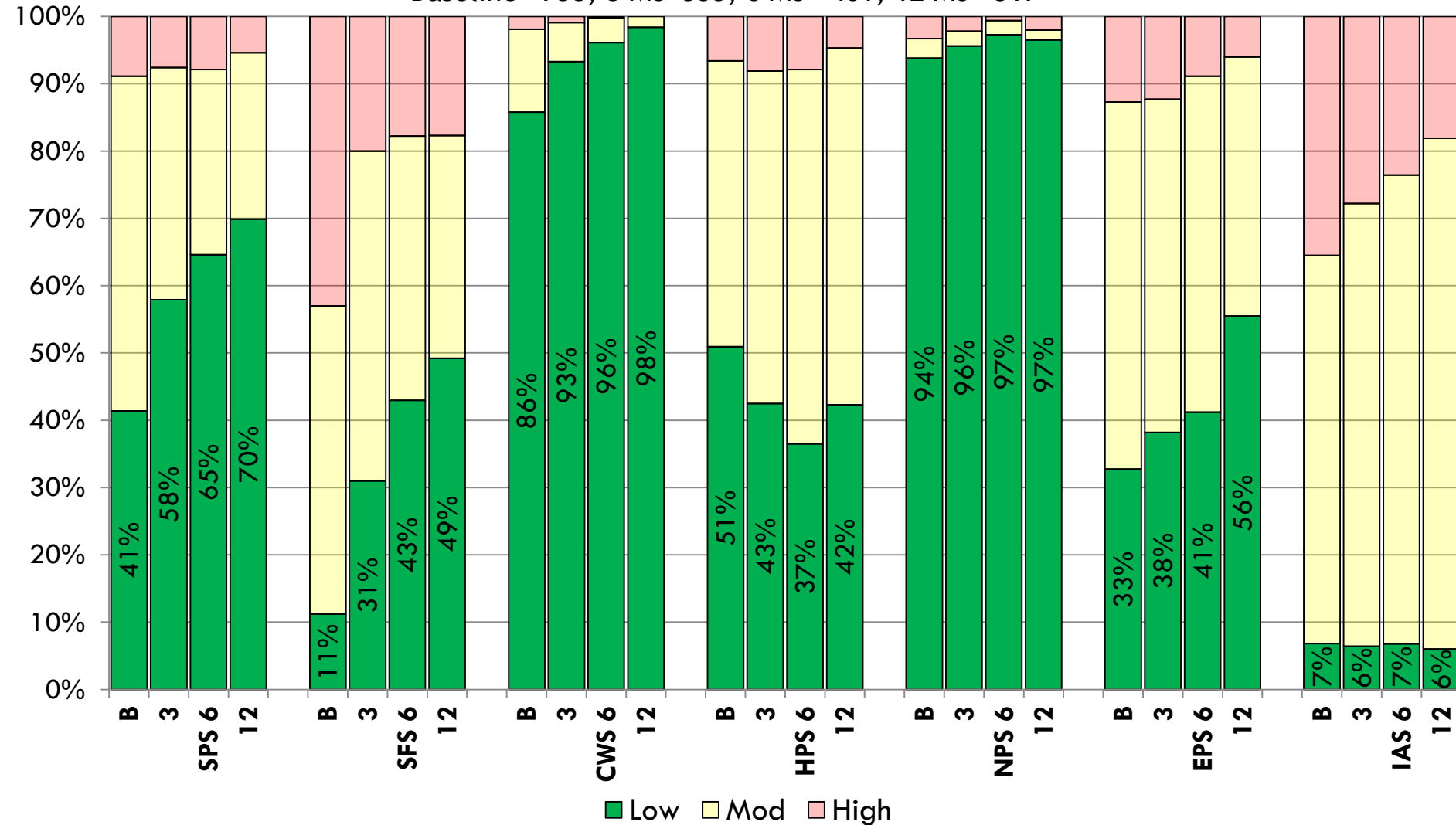
36

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)				
Dim 1: Acute Intoxication/ Withdrawal Potential		↑ 18-25		
Dim 2: Biomedical Conditions or Complications		↓ 15-17		
Dim 2: HIV Risk Behaviors	↓ <15			
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications				
Dim 3: Crime and Violence				
Dim 4: Readiness to Change				
Dim 5: Relapse Continued Use or Continued Problems				
Dim 6: Recovery/Living Environment				
Dim 6: Social Support				
Dim 6: School/Work	↓ 18-25	↓ 18-25	↑ 18-25	

Outcomes by ASAM Dimension

37

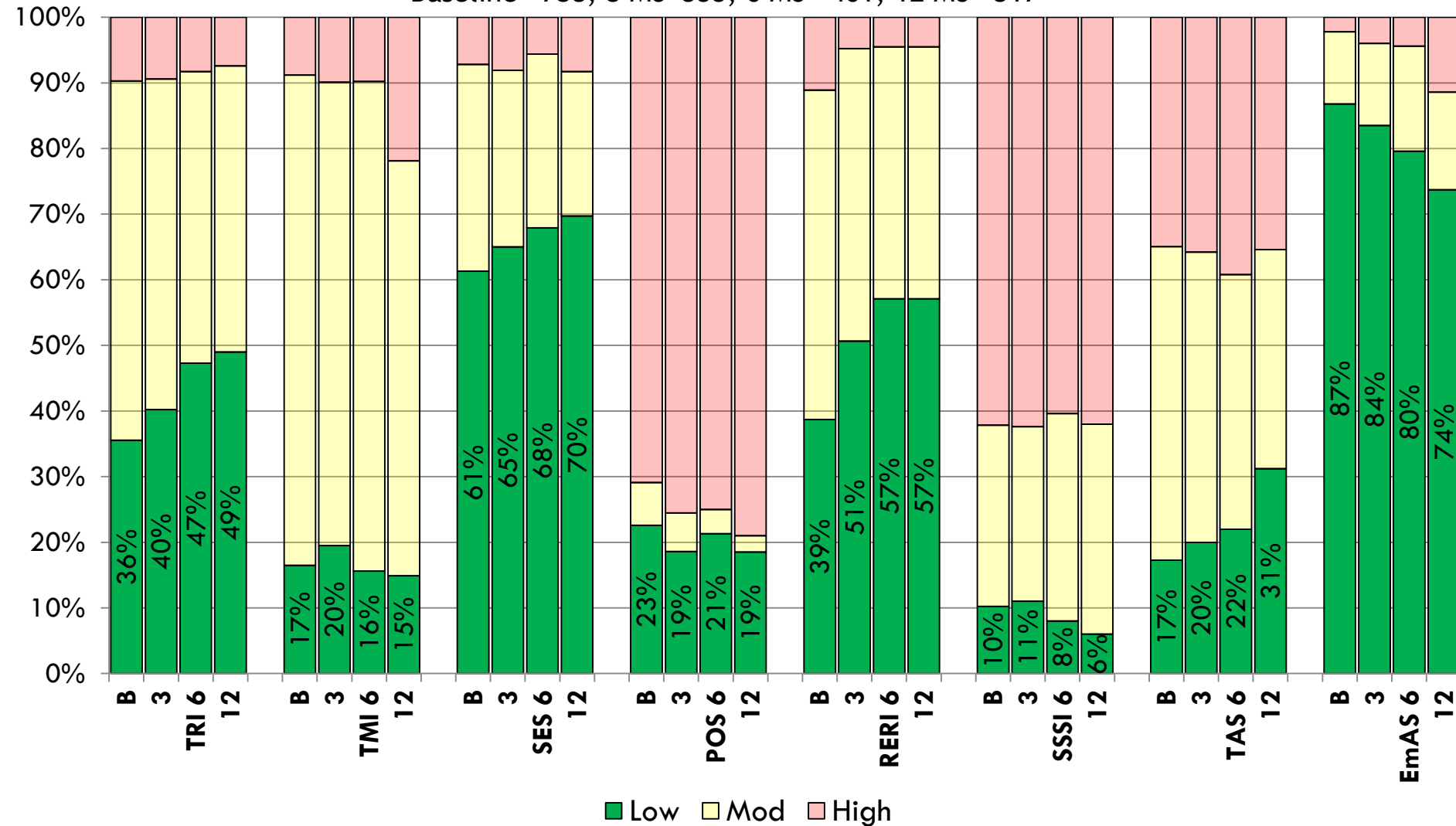
Baseline= 738, 3 Mo=555, 6 Mo= 461, 12 Mo= 317



Outcomes by ASAM Dimension

38

Baseline= 738, 3 Mo=555, 6 Mo= 461, 12 Mo= 317





Practical issues for implementing measures

Measures and Sources: Practical Issues

Measure	Data Source/Item	Issues to Overcome
Occurrence of Screening and/or Assessment	Date of the Screening or Assessment in EHR or on screener/assessment	If using standardized screening or assessment; integration of scores or diagnoses with EHR
Need for Treatment	Result of clinical determination, screening, assessment, ICD Codes	Matching “need” to “service”. Measuring multiple domains.
Initiation, engagement, continuing care	Administrative data (dates of services and CPT codes)	Need dates by meaningful CPT codes in order to assess type of service, need LOC changes, disposition of services (step up/down) helpful.
Severity of Need	ICD, clinical determination, result of screening or assessment	Variation among staff diagnosis, formal assessment requires resources and integration with EHR.
Services Received	CPT codes, follow-up assessment	CPT codes often not specific enough, follow-up assessment integration with EHR
Severity at Intake and Follow-up	Clinical markers for severity (ongoing ICD codes), follow-up assessment	ICD codes not always current as of discharge, FU assessment integration with EHR.

Screening and Assessment

Home Page

Agency ▶

Group List ▶

Client List ▼

Client Profile ▶

Non-Episode Contact

Activity List ▼

Intake

Wait List

Tx Team

Screening ▶

Assessments ▶

Admission ▼

Profile

Financial/Household

Youth

Substance Abuse

Legal

Assmt Scores

ASAM

Diagnosis

Program Enroll

Treatment Team

ECourt ▶

Encounters ▶

Notes ▶

Admission Profile

Full Name: Flintstone, Pebbles

Referral Source: Family or Friend

Gender: Female

DOB: 1/1/1960

County of Res. Adak

Race:

Ethnicity:

Age: 48

Basis for Decision

Potential Client for SA No ▼ Based on Referral ▼

Potential Client for MH Yes ▼ Based on Referral ▼

Potential Client for TBI ▼ ▼

Treating Here For SA ▼

Est. Duration of TX (days)

Client Type ▼

Admission Type First admission ▼

Admission Staff Clinician, Ima ▼

Screening/Admission for Concerned Person No ▼

of Prior SA TX Admissions

of Non-TX SA Related Hospitalizations in Past 6 Months

of Prior MH TX Admissions

of Prior MH Hospitalizations

of Months Since Last Discharge

Client Reported Health Status ▼

Mental Health Problem ▼

Pharmacotherapy Planned No ▼

Functional Assessment Done ▼

On Psychotropics ▼

Admission Date 2/1/2008

Cancel

Save

Finish

Next

TEDS Data

Home Page
Agency ►
Group List ►
Client List ▼
Client Profile ►
Non-Episode Contact
Activity List ▼
Intake
Wait List
Tx Team
Screening ►
Assessments ►
Admission ▼
Profile
Financial/Household
Youth
Substance Abuse
Legal
Assmt Scores
ASAM
Diagnosis
Program Enroll
Treatment Team
ECourt ►

Client Admission for Flintstone, Pebbles

Substance Abuse

Rank	Substance	Severity	Frequency	Method
Primary:	Alcohol ▼	Severe Problem/Dysfnc ▼	2-3 times daily ▼	Oral ▼
Secondary:	▼			
Tertiary:				

At what age did the client FIRST use the substances indicated above (if unknown, enter "97"; if not applicable, enter "96").

Primary 13

Secondary

Tertiary

of DAYS since LAST use of the substances indicated above:

Primary

Secondary

Tertiary

of Days Abstinent in Last 30 Days

of Days in Support Group

in Last 30 Days

of Days Attended AA/NA/Similar

Meetings in Last 30 Days

Other Addictions

Alcohol

Selected Other Addictions

Does Client Currently Use Tobacco 0-No Tobacco Use ▼

Comments

Cancel

Save

Finish

Previous

Next

Diagnosis (ICD) and Procedures/Encounters (CPT)

- Home Page
- Agency ▶
- Group List ▶
- Client List ▼
- Client Profile ▶
- Non-Episode Contact
- Activity List ▼
- Intake
- Wait List
- Tx Team
- Screening ▶
- Assessments ▶
- Admission ▼
- Profile
- Financial/Household
- Youth
- Substance Abuse
- Legal
- Assmt Scores
- ASAM
- Diagnosis**
- Program Enroll
- Treatment Team
- ECourt ▶
- Encounters ▶**
- Notes ▶
- Treatment ▶

Client Diagnosis

Primary

296.31-Major Depressive Disorder, Recurrent, Mild(DSM)

▼

Secondary

▼

Tertiary

▼

Axis I	Code	Description	Specifier	Principal	Created/Updated

Axis II	Code	Description	Specifier	Principal	Created/Updated

Axis III	Code	Description	Specifier	Principal	Created/Updated

Axis IV	Code	Description	Specifier	Principal	Created/Updated

Axis V

[Edit Axis Evaluation](#)

Cancel

Save

Finish

Previous

Next

Discharge and Outcomes

- Home Page
- Agency ▶
- Group List ▶
- Client List ▼
- Client Profile ▶
- Non-Episode Contact
- Activity List ▼
- Intake
- Wait List
- Tx Team
- Screening ▶
- Assessments ▶
- Admission ▼
- Profile
- Financial/Household
- Youth
- Substance Abuse
- Legal
- Assmt Scores
- ASAM
- Diagnosis
- Program Enroll
- Treatment Team
- ECourt ▶
- Encounters ▶
- Notes ▶
- Treatment ▶
- Outcomes ▶
- Discharge ▶

Admission Profile

Full Name:	Flintstone, Pebbles	County of Res.	Adak
Referral Source:	Family or Friend	Race:	
Gender:	Female	Ethnicity:	
DOB:	1/1/1960	Age:	48

Basis for Decision		Treating Here For	MH/SA ▼
Potential Client for SA	No ▼ Based on Referral ▼	Est. Duration of TX (days)	<input type="text"/>
Potential Client for MH	Yes ▼ Based on Referral ▼		
Potential Client for TBI	▼ ▼		
Client Type	▼		
Admission Type	First admission ▼	Admission Date	2/1/2008
Admission Staff	Clinician, Ima ▼		
Screening/Admission for Concerned Person	No ▼		
# of Prior SA TX Admissions	<input type="text"/>	Client Reported Health Status	▼
# of Non-TX SA Related Hospitalizations in Past 6 Months	<input type="text"/>	Mental Health Problem	▼
# of Prior MH TX Admissions	<input type="text"/>	Pharmacotherapy Planned	No ▼
# of Prior MH Hospitalizations	<input type="text"/>	Functional Assessment Done	▼
# of Months Since Last Discharge	<input type="text"/>	On Psychotropics	▼

Cancel Save Finish Next



Performance Measurement and Quality: Integrating Performance Indicators into Everyday Practice

Take Home Worksheet!

Identification of performance measures, data sources, measurement strategies, reporting process, and use of information

- I. Edit table as needed to document your agency's performance measures, data sources, formula, benchmark and barriers. Always keep in mind "Is the data readily available to and in the right format for the person who will create the reports?"

Performance Measure	Primary Data Source(s)	Measurement (formula)		Benchmark	Issues to overcome (not currently collected, incorrect measurement, integration of data sources, etc.)
		Numerator	Denominator		
Performance					
Screening	GAIN SS in GAIN ABS (or other screening)	# of clients screened with GAIN SS (or other)	Total number of clients	100%	GAIN ABS screening results (ID, date of screening and 9 screeners*) must be imported into EHR.
Assessed	GAIN-I in GAIN ABS (or other assessment)	# of clients assessed with GAIN-I (or other)	Total # clients with screening results in mod-high range	100%	GAIN ABS assessment results (ID, date of assessment, dx*) must be imported into EHR.
Admissions	EHR	# of clients with intake encounter as defined by CPT codes (List out):	# clients with dx of abuse or dependence (list out ICD)	100%	CPT code must be explicit to index admission or provide additional criteria. GAIN ABS assessment results (ID, date of assessment, dx*) must be imported into EHR.
Receipt of EBP	EHR	# clients receiving EBP (coded as any EBP session identified by ??)	# client admissions	100%	CPT Code must be specific enough to identify EBP from other services or provide additional criteria (and import into EHR). If multiple EBP serving specific needs (trauma, HIV, etc.) codes must be specific enough to identify each EBP.

Reporting

The screenshot displays the SSRS Design Report view. The Explorer pane on the left shows the 'Cross-Agency Model' with entities like 'Asi Assessment', 'Claim Item', 'Client', 'Client Group Enrollment', 'Client Prog Enroll', 'Client Treatment Team', 'Discharge', 'Encounter', and 'Eob Transaction'. The Fields pane shows various data fields including 'Client Full Name', 'Client Gender', 'Client Birth Date', 'Social Security Number', 'Treatment', 'Total Intake Case Number', 'Start Date', 'Start Time', 'End Date', 'End Time', 'Cd Service Id', 'Total Balance Amount', 'Service Name', 'Cpt Code', and 'Cpt Mod 1'.

The report itself is titled 'SSRS demo video report' and contains a table with the following data:

Agency Name	#Admissions
	5
	5
	17
Lucky Deuce	2
Mendocino Community Health Clinic, Inc.	4
Mendocino County Agency	368
Total	401

How to measure these domains?
Identification of numerators and denominators...

Working with Existing Processes

- Working with your Quality Improvement/Quality Management/Continuous Quality Improvement staff
 - ▣ Identification of measures, data sources and analytic method likely already in progress
 - ▣ May only include referral, admission, discharge rates
- Working with EHR developers
 - ▣ Early identification of modifications to “off the shelf” software
 - ▣ Will likely require additional cost
- Working with screening and assessment developers
 - ▣ Push data from screening/assessment to EHR
 - ▣ Easier (and cheaper) than you might think

Use and Dissemination

- Plan, Do, Study, Act (PDSA) cycles
 - ▣ Start small
- Internal
 - ▣ Dashboards
 - ▣ Subscriptions to reports
- External
 - ▣ Scorecards for performance
 - ▣ Consumers/Community