PERFORMANCE MEASUREMENT AND QUALITY: INTEGRATING PERFORMANCE INDICATORS INTO EVERYDAY PRACTICE

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SIROW

Chestnut Health Systems

CARNEVALE ASSOCIATES LLC
Strategic Policy Solutions

RECLAIMING FUTURES
Communities helping teens overcome drugs, alcohol & crime

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		edication, emergency
Dim 3: Emotional Cognitive Condit Complications		dication, emergency
Dim 4: Readiness		eks post intake
Dim 5: Relapse C Continued Proble		
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		val
Dim 2: Biome Complication		ed by
Dim 3: Emoti Cognitive Co Complication		d by
Dim 3: Emoti Cognitive Co Complication		ng in
Dim 4: Readi		ce
Dim 5: Relap Continued Problem Potential	Using	t Using
Dim 6: Recovery/Living Environment	Percentage of Past 90 Days in Treatment	Percentage of Past 90 Days in Treatment

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

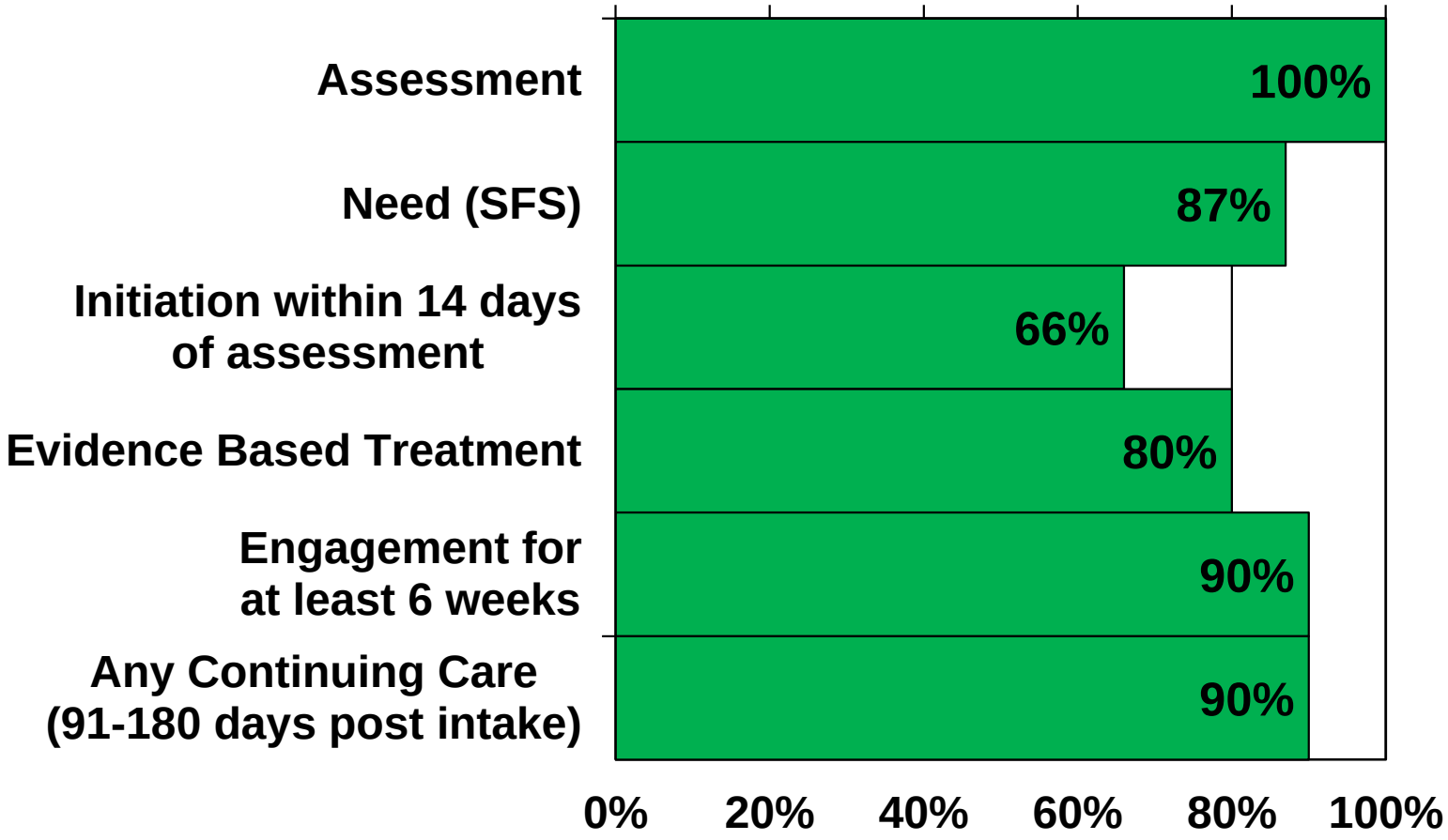
Reclaiming Futures JTDC (RF-JTDC) Sites & Data

- Cohort of 5 Reclaiming Futures (RF)/Center for Substance Abuse Treatment (CSAT) collaboration grantee sites using the GAIN in Denver, CO; Hardin County, OH; Snohomish County, WA; Travis County, TX; & Ventura County, CA.
- Intake data collected on 436 adolescents from these sites between January 2008 through December 2012
- Follow-up data was available for 387 (92% of 420 due) adolescents with 1+ follow-up at 3, 6, and 12-months post intake.

Demographics: Five JDCRF Sites (N=436)

Characteristic	Number	Percent
Gender		
Male	327	75%
Female	109	25%
Age (max is 19)		
< 15	46	11%
15-17	352	81%
18-25	38	9%
Race/Ethnicity		
African American	38	9%
White	135	31%
Hispanic	175	40%
Multi-Racial	77	18%
Other	10	2%

Performance Measurement



SAMHSA 2012 GAIN SA Data Set subset to JDCRF sites and 1+ Follow ups (n=387)

Effectiveness, Efficiency, and Equity

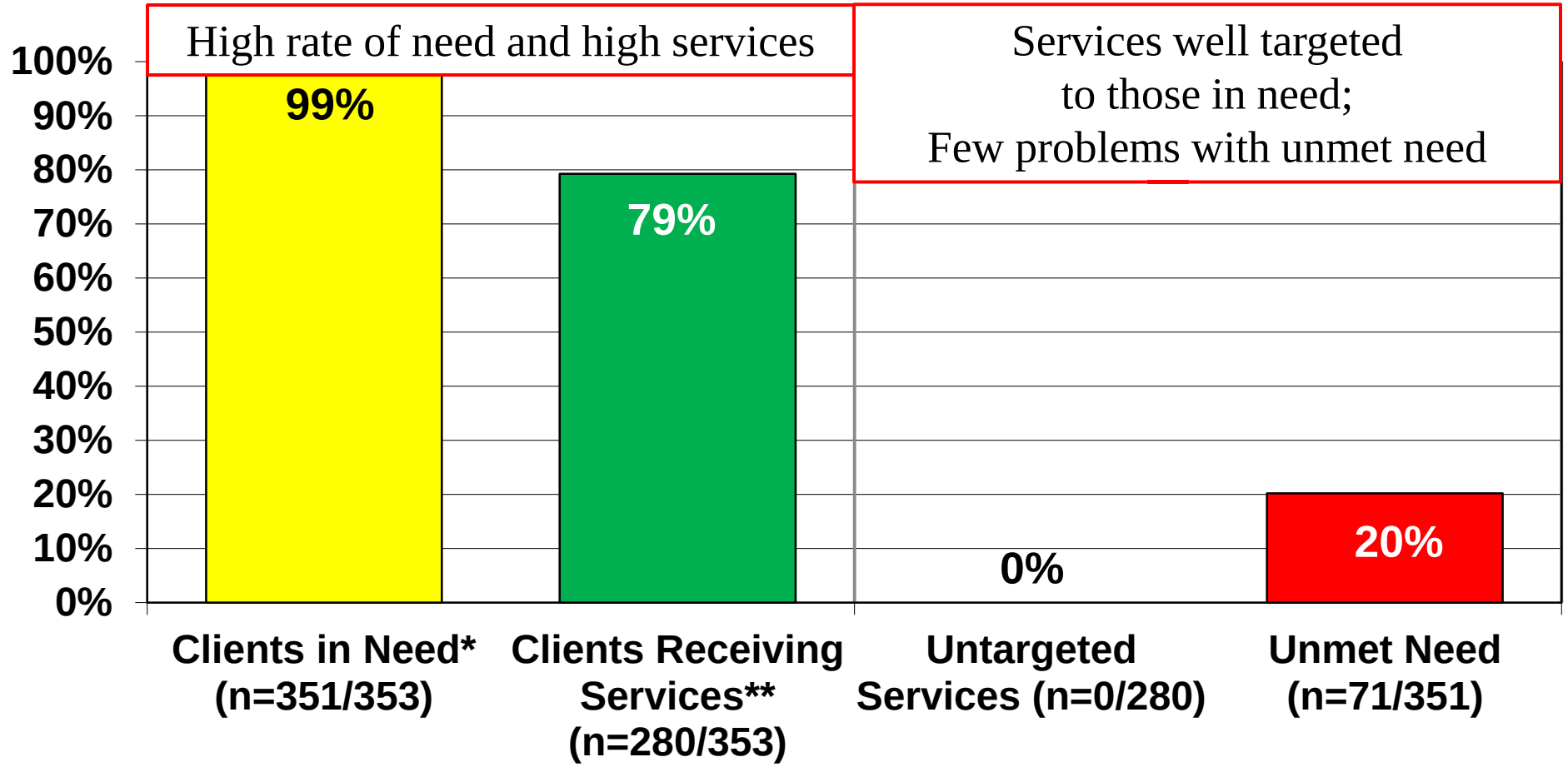
Clients in Need is the percent of all people who have moderate to high need.

Clients Receiving Services is the percent of all people receiving any treatment in the past 90 days.

Untargeted Services is the percent of people in no or low need who received services in the next 3 months.

Unmet Need is the percent of people in need with mod/high need for treatment who did NOT receive treatment for it during the next 3 months.

ASAM A: Substance Problems, Services Received, Untargeted Services and Unmet Need



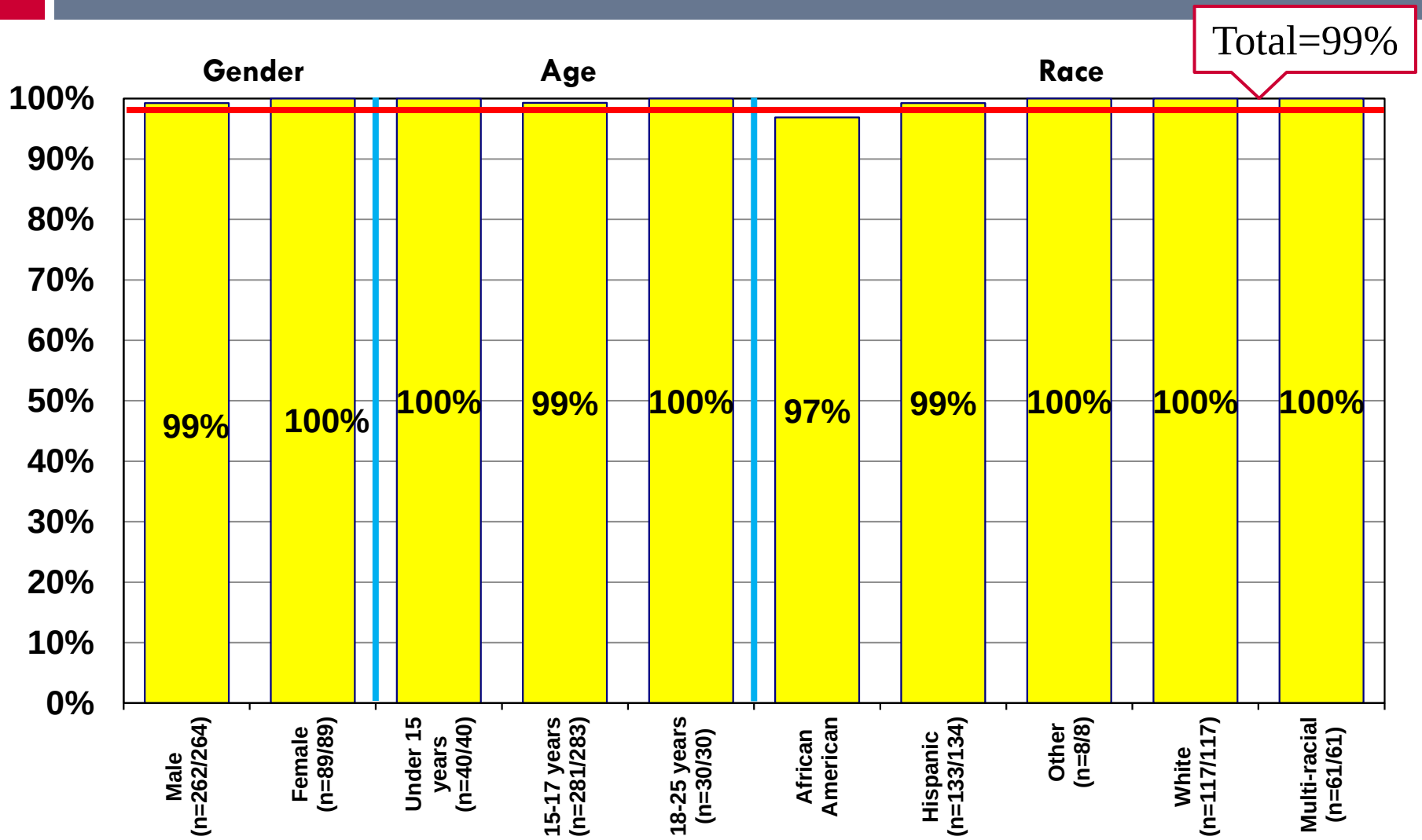
*Any past year AOD problems, weekly use, abuse, or dependence

** 'Services' is self-report of any days of SA treatment at 3 months

SAMHSA/CSAT 2012 GAIN SA Data Set subset to JDCRF sites and has 3m Follow up (n=360)

Need: Any Past Year AOD Problems, Weekly Use, Abuse, or Dependence

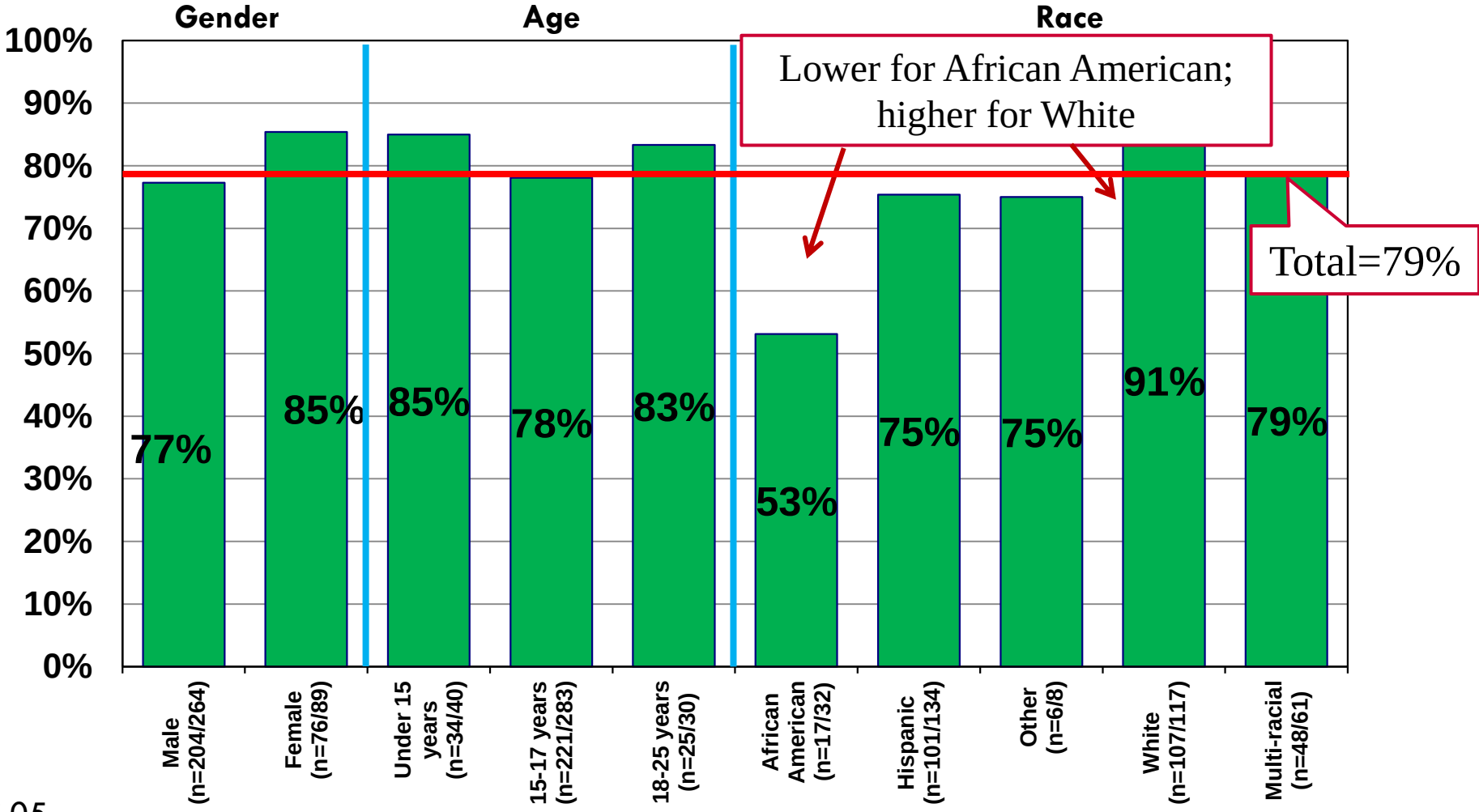
by Gender, Age and Race/Ethnicity



SAMHSA/CSAT 2012 GAIN SA Data Set subset to JDCRF sites and has 3m Follow up (n=360)

Service Utilization: Received Substance Treatment in Past 90 Days (At Follow-up)

by Gender, Age and Race/Ethnicity

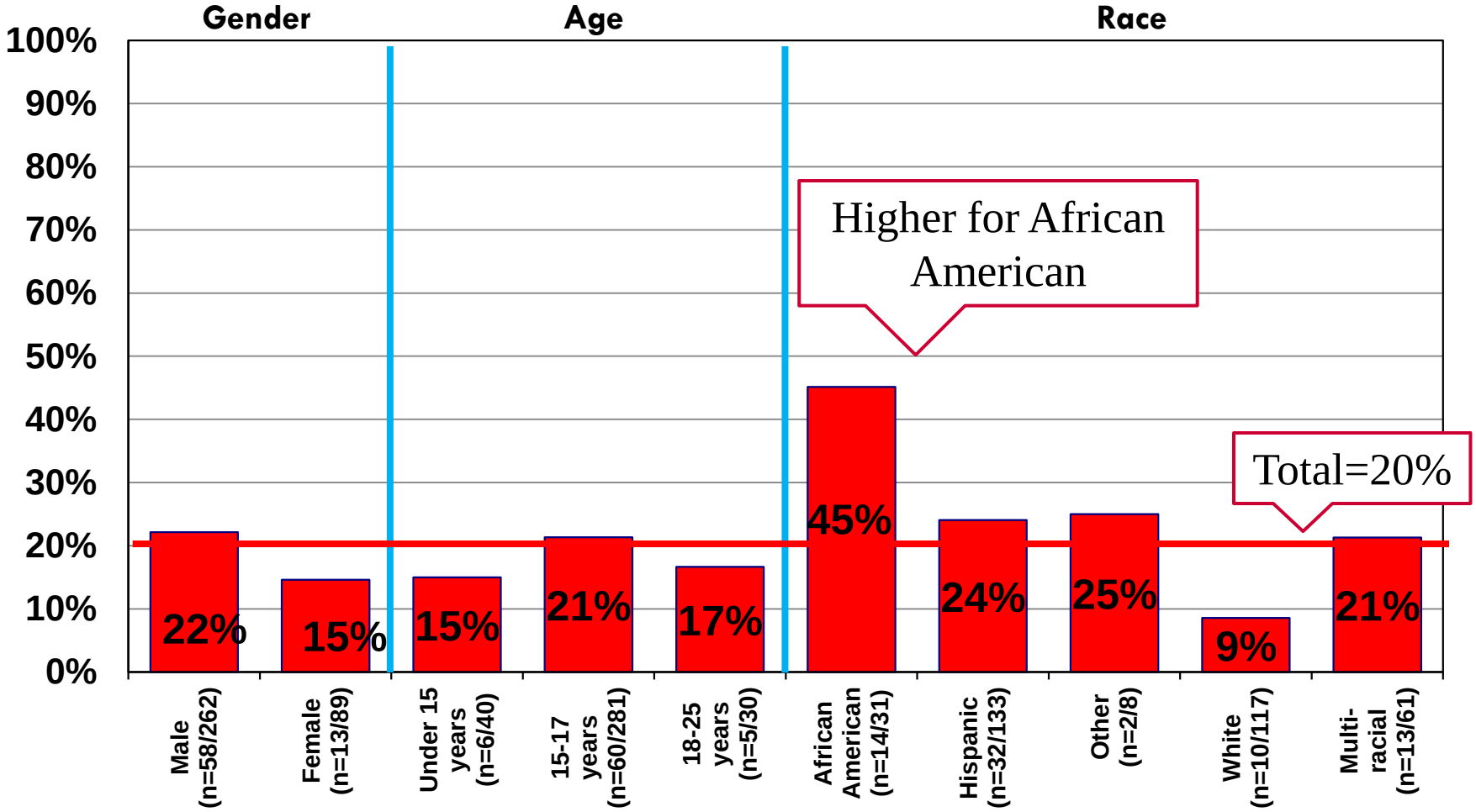


* p<.05

SAMHSA/CSAT 2012 GAIN SA Data Set subset to JDCRF sites and has 3m Follow up (n=360)

Unmet Need: Need for Substance Use Treatment But None Received by 3 Months

by Gender, Age and Race/Ethnicity



* p<.05

SAMHSA/CSAT 2012 GAIN SA Data Set subset to JDCRF sites and has 3m Follow up (n=360)

Effectiveness and Efficiency

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)	99%	79%	0%	20%
Dim 1: Acute Intoxication/ Withdrawal Potential	13%	3%	44%	89%
Dim 2: Biomedical Conditions or Complications	41%	40%	47%	47%
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	75%	36%	14%	58%
Dim 4: Readiness to Change	88%	90%	12%	10%
Dim 5: Relapse Continued Use or Continued Problems	89%	97%	11%	3%
Dim 6: Recovery/Living Environment	100%	24%	0%	76%

Effectiveness and Efficiency

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)	**99%** 351/353	**79%** 280/353	**0%** 0/280	**20%** 71/351
Dim 1: Acute Intoxication/ Withdrawal Potential	**13%** 47/353	**3%** 9/353	**44%** 4/9	**89%** 42/47
Dim 2: Biomedical Conditions or Complications	**41%** 144/355	**40%** 143/355	**47%** 67/143	**47%** 68/144
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	**75%** 267/358	**36%** 128/358	**14%** 18/129	**58%** 156/267
Dim 4: Readiness to Change	**88%** 249/282	**90%** 255/282	**12%** 30/255	**10%** 27/249
Dim 5: Relapse Continued Use or Continued Problems	**89%** 319/357	**97%** 346/357	**11%** 37/346	**3%** 10/319
Dim 6: Recovery/Living Environment	**100%** 353/353	**24%** 86/353	**0%** 0/86	**76%** 267/353

Highlighted any percentage that impacted over 33% of relevant group

Equity

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)		↓ African Am.		↑ African Am.
Dim 1: Acute Intoxication/ Withdrawal Potential				
Dim 2: Biomedical Conditions or Complications	↓ African Am.	↓ African Am.		
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	↓ African Am.	↓ African Am.		↑ African Am.
Dim 4: Readiness to Change	↓ African Am.		↑ African Am.	
Dim 5: Relapse Continued Use or Continued Problems	↓ African Am.		↑ African Am.	
Dim 6: Recovery/Living Environment		↓ African Am.		

African Americans reported lower severity, received less services, had more untargeted services and more unmet need than other race/ethnic groups

Equity

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)		↑ White		
Dim 1: Acute Intoxication/ Withdrawal Potential		↑ White		
Dim 2: Biomedical Conditions or Complications		↑ Whites		↓ Whites
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications				
Dim 4: Readiness to Change				↑ White
Dim 5: Relapse Continued Use or Continued Problems				
Dim 6: Recovery/Living Environment				↓Whites

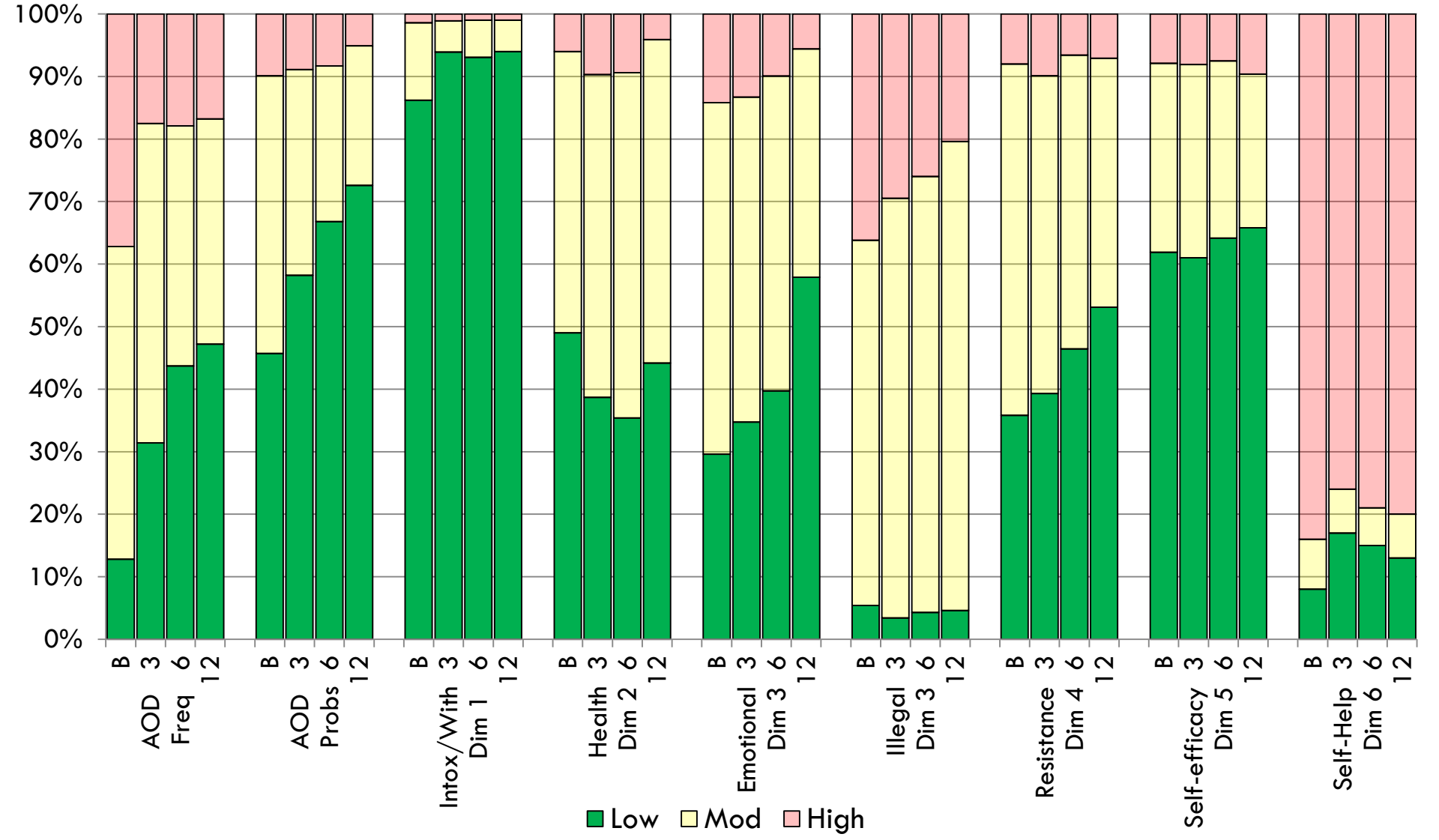
Whites received more services than other race/ethnic groups

Equity

ASAM Dimension	Need	Received Services	Untargeted Services	Unmet Need
Diagnosis (Substance Use, Abuse or Dependence)		↑ White ↓ African Am.		↑ African Am.
Dim 1: Acute Intoxication/ Withdrawal Potential		↑ White ↑ 18-25	Other differences in red	
Dim 2: Biomedical Conditions or Complications	↑ Female ↓ African Am.	↑ Females, <15 ↑ Whites ↓ African Am.		↓ Whites
Dim 3: Emotional, Behavioral or Cognitive Conditions and Complications	↑ Females ↓ African Am.	↑ Females ↓ African Am.	↑ Males ↑ 18-25	↑ Males ↑ African Am. ↓ Other
Dim 4: Readiness to Change	↓ African Am.	↓ Other	↑ African Am.	↑ 18-25 ↑ White ↑ Other
Dim 5: Relapse Continued Use or Continued Problems	↓ African Am.		↑ African Am.	
Dim 6: Recovery/Living Environment		↓ African Am. ↓ Hispanic		↓Whites

Outcomes by ASAM Dimension

SAMHSA 2012 GAIN SA Data Set subset to JDCRF sites
Baseline= 436, 3 Mo=360, 6 Mo= 302, 12 Mo=197

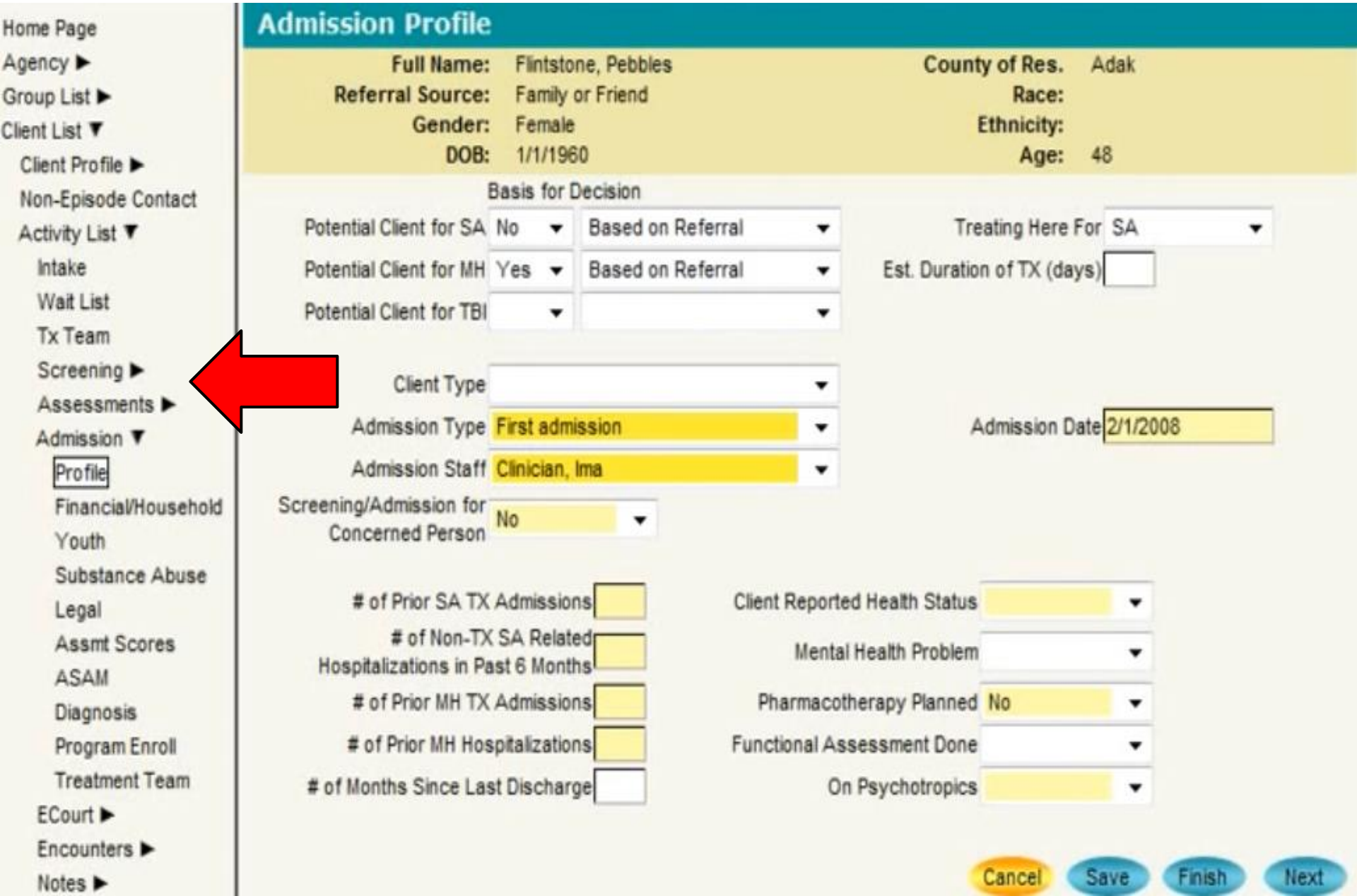


Practical issues for implementing measures

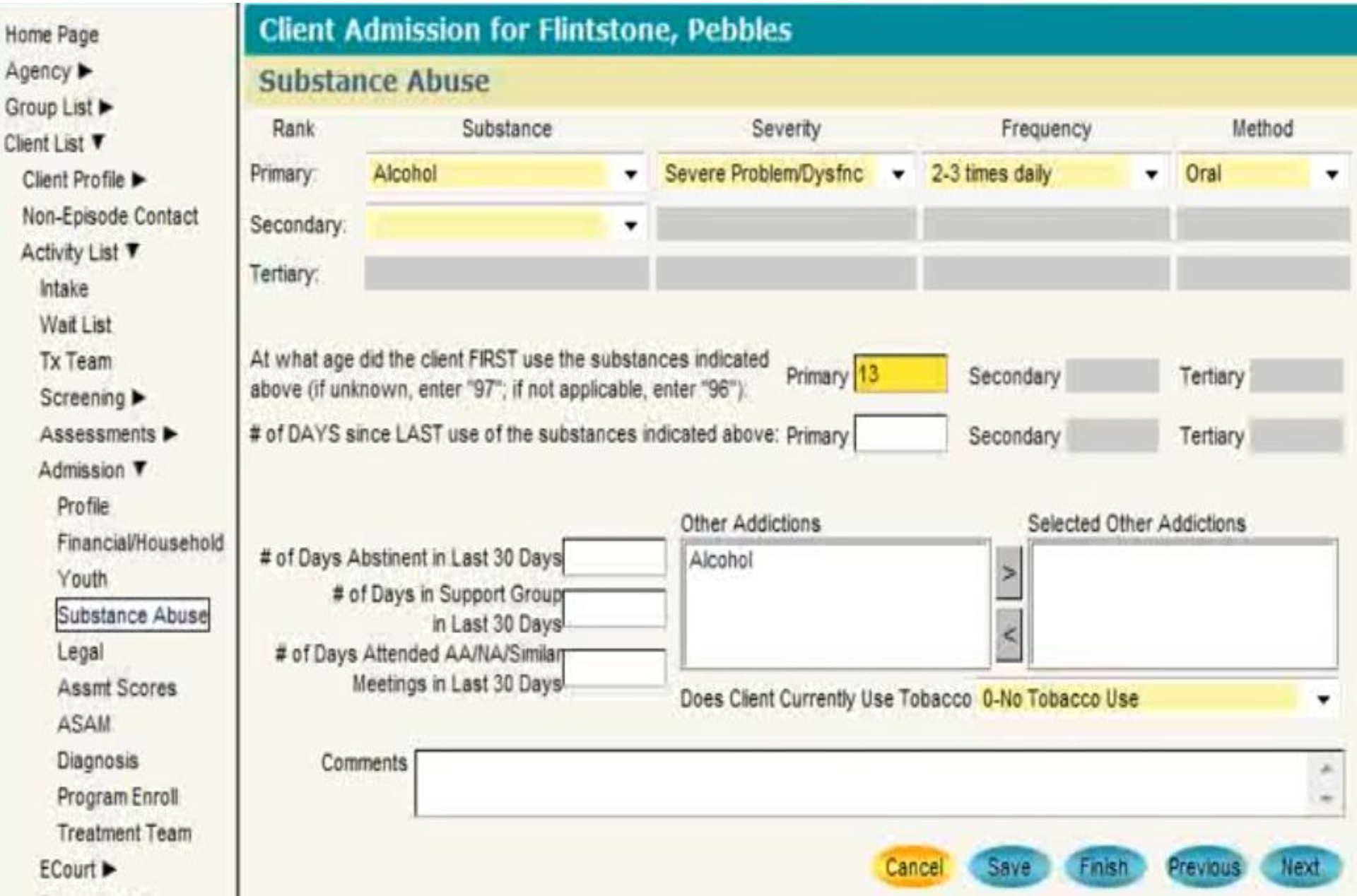
Measures and Sources: Practical Issues

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.

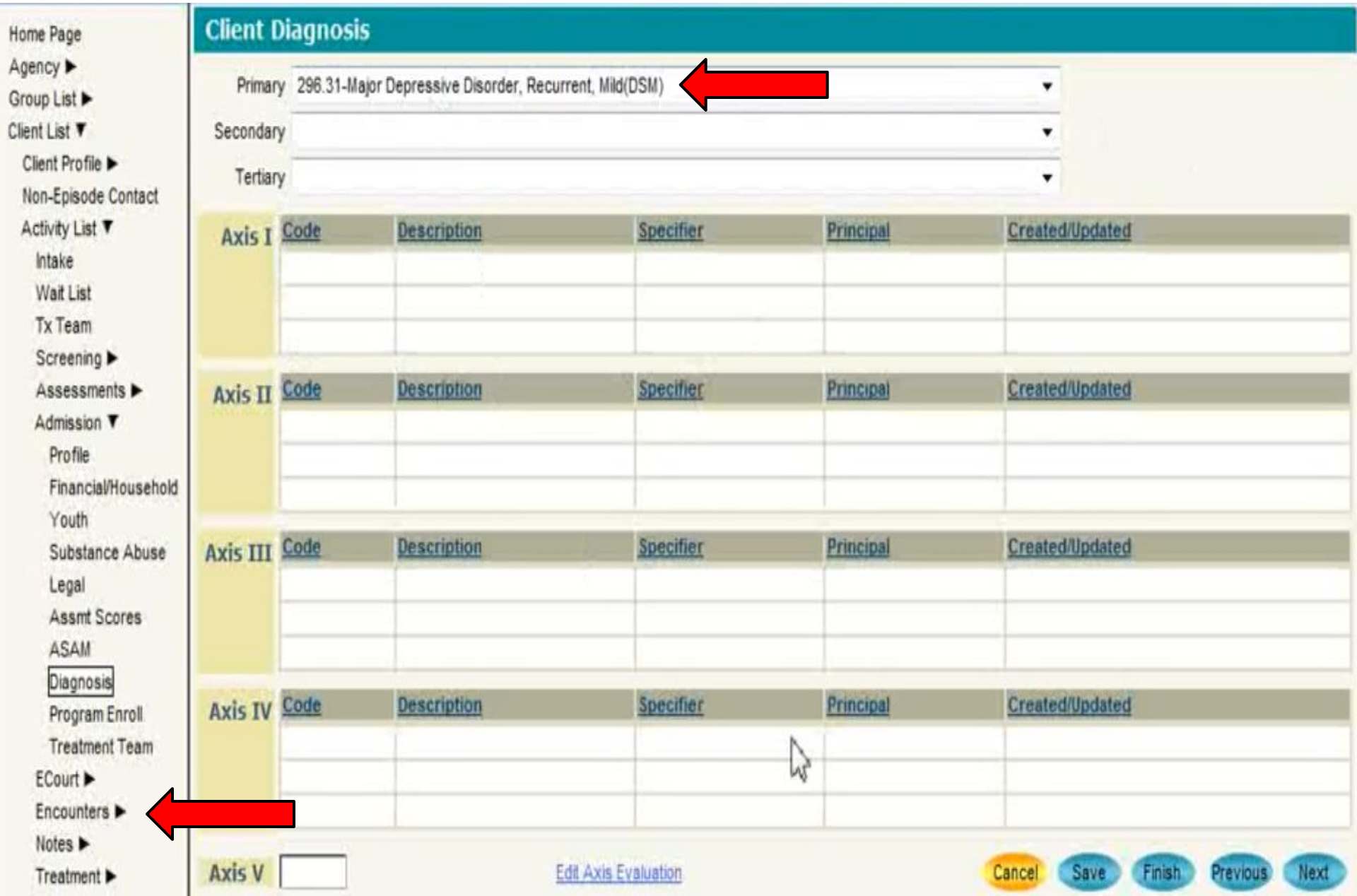
Screening and Assessment



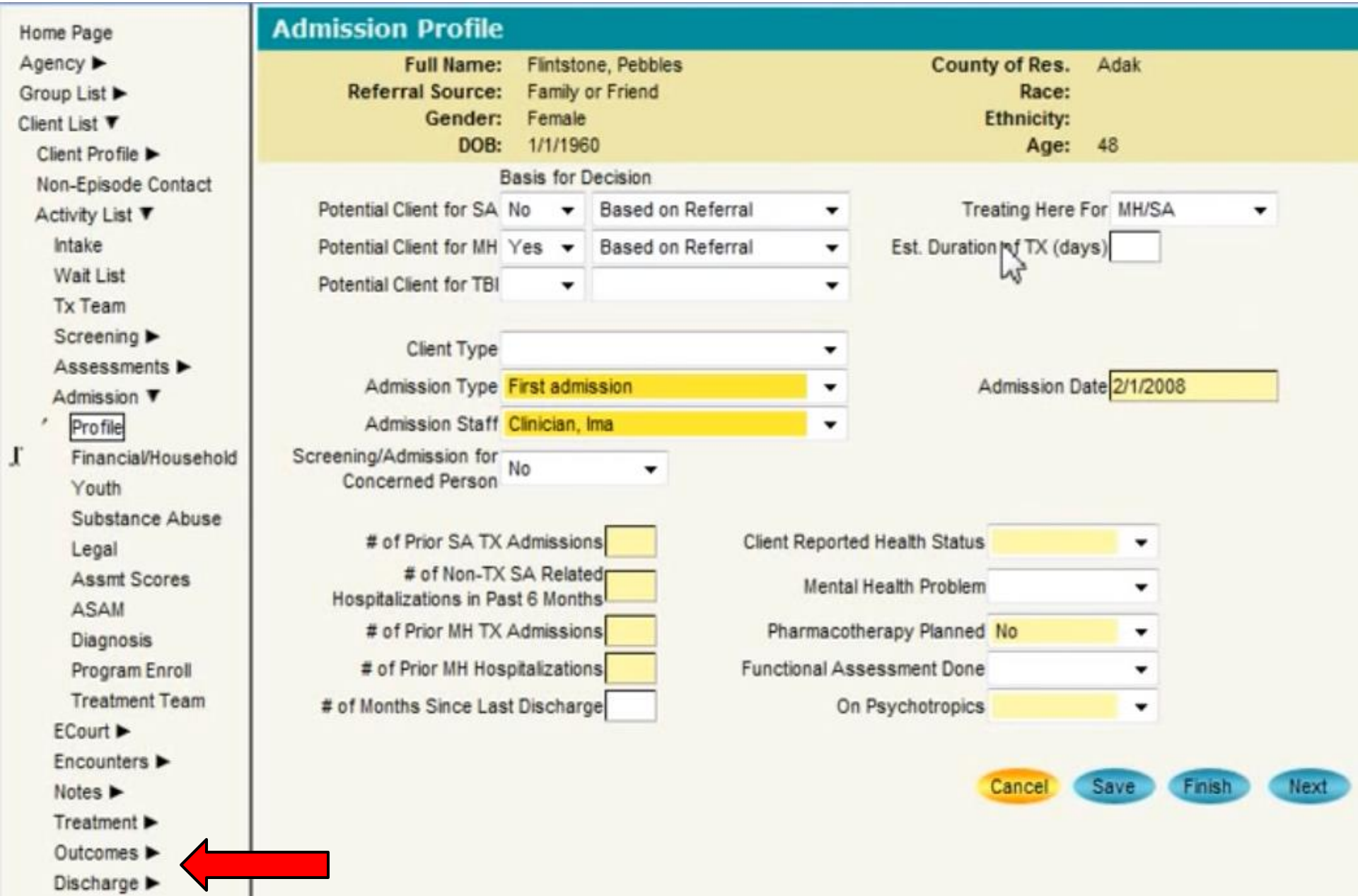
TEDS Data


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)



Discharge and Outcomes



Performance Measurement and Quality: Integrating Performance Indicators into Everyday Practice

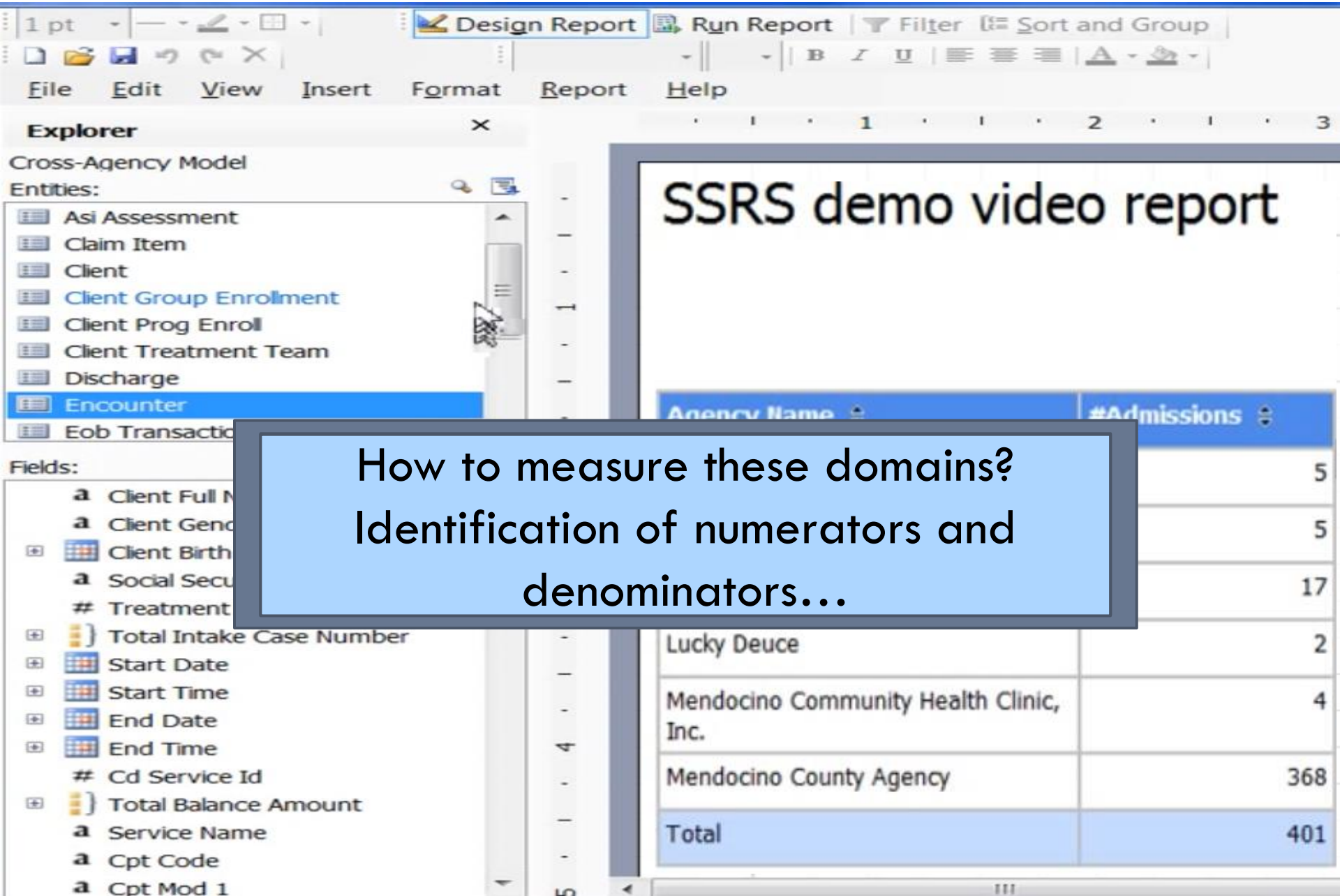
Take Home Worksheet!

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


Design Report
Run Report
Filter
Sort and Group
File
Edit
View
Insert
Format
Report
Help
Explorer
Cross-Agency Model
Entities:
Asi Assessment
Claim Item
Client
Client Group Enrollment
Client Prog Enroll
Client Treatment Team
Discharge
Encounter
Eob Transactio
Fields:
Client Full N
Client Genc
Client Birth
Social Secu
Treatment
Total Intake Case Number
Start Date
Start Time
End Date
End Time
Cd Service Id
Total Balance Amount
Service Name
Cpt Code
Cpt Mod 1
SSRS demo video report
#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

Dissemination and Use

- Internal
  - Dashboards
  - Subscriptions to reports
- External
  - Scorecards for performance
  - Consumers/Community

Questions?

- For questions about this presentation, please contact Barbara Estrada at 309-451-7891 or bestrada@chestnut.org
- For questions on the National Cross-Site Evaluation, contact Monica Davis, Evaluation Coordinator at 520-295-9339 x211 or midavis@email.arizona.edu
- For questions about Reclaiming Futures, please contact Susan Richardson at (503) 725-8914 or susan.richardson@pdx.edu

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