

# **S.M.A.R.T. Treatment Planning Utilizing the Addiction Severity Index (ASI): Making Required Data Collection Useful**

## **Panelists**

- Deni Carise, Ph.D., Treatment Research Institute, Philadelphia**
- Ron Jackson, MSW, Evergreen Treatment Services, Seattle**
- Pat Stilen, LCSW, CADAC, Mid-America ATTC, Kansas City**



# NIDA Blending Teams

## Who?

- NIDA Researchers
- SAMHSA's Addiction Technology Transfer Centers (ATTCs)

## What do they do?

- Work together to develop 'products' based on research conducted within NIDA's Clinical Trials Network (CTN) and other supported research

## Why do they do it?

- To give treatment providers the necessary tools to adopt science-based interventions in community-based programs



# NIDA Blending Teams



- **Create necessary tools to allow for the trouble-free adoption of science-based interventions in community-based programs.**



# Are NIDA Blending 'Products' Available?

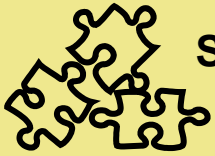
## Products Completed

1. Buprenorphine Treatment: Training for Multidisciplinary Addiction Professionals
2. Short-Term Opioid Withdrawal Using Buprenorphine
3. S.M.A.R.T. Treatment Planning: Utilizing the Addiction Severity Index (ASI)

## In Development

4. Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency (MIA: STEP)
5. Promoting Awareness of Motivational Incentives (PAMI)





## S.M.A.R.T. Treatment Planning Utilizing the Addiction Severity Index (ASI): Making Required Data Collection Useful

### **NIDA Researchers**

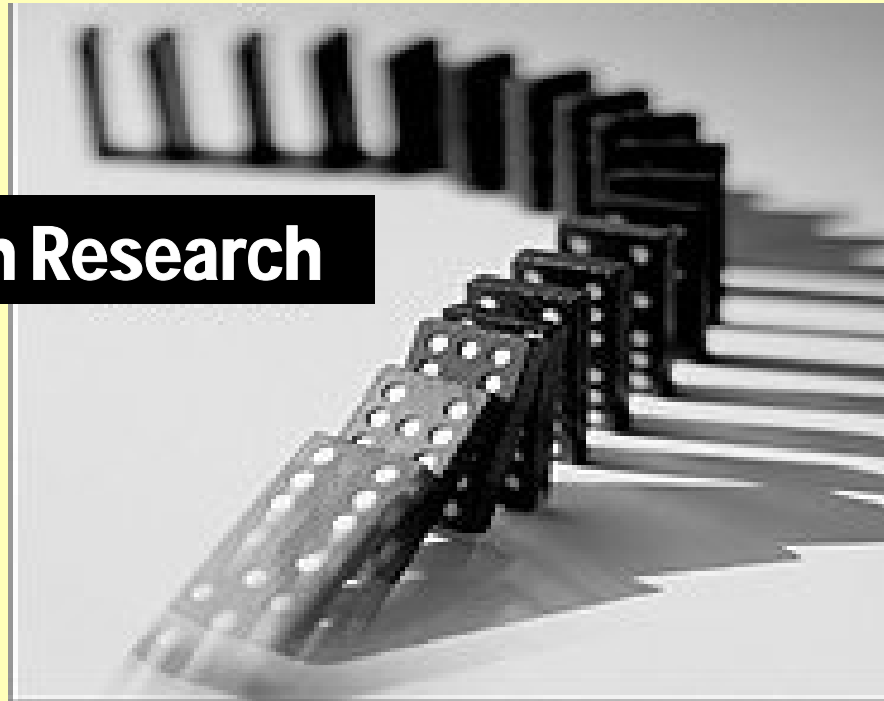
- Deni Carise, Ph.D., Treatment Research Institute
- Meghan Love, Treatment Research Institute
- Tom McLellan, Ph.D., Treatment Research Institute

### **ATTCs**

- Nancy Roget, Mountain West ATTC
- Dick Spence, Gulf Coast ATTC
- Pat Stilen, Mid-America ATTC



# Working with Research







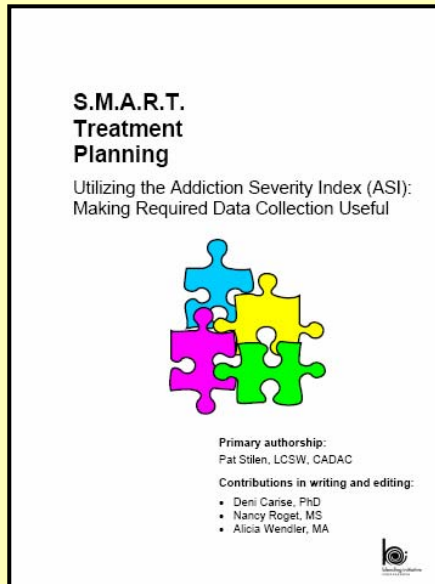






# NIDA Approved Products

## 6-hour classroom



- Trainer script
- PowerPoint slides (CD-Rom)
- Handouts
- Reference Lists/Examples

## 4-week online version



- Designed in **Moodle** course management system (CMS)

*(Free, open source software!)*

# The Training Package

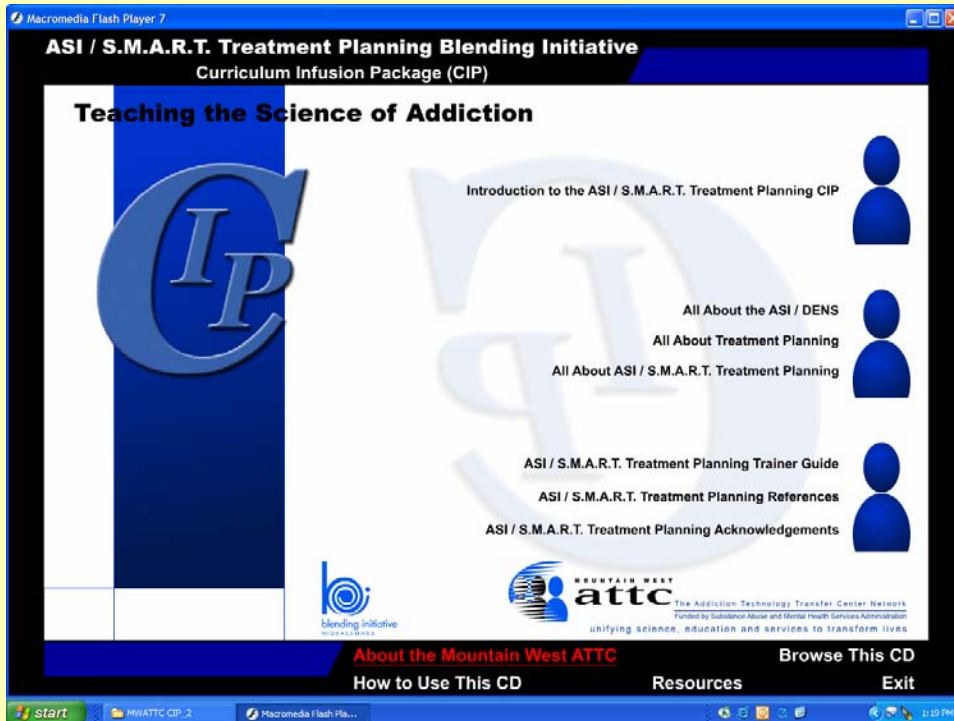


- **How ASI can be used in clinical and program evaluation activities**
- **Identifies differences between program-driven and individualized treatment planning processes**
- **Focus on process of treatment planning**
- **Defines guidelines and legal considerations in documenting client status**

# Adapted Products

## Mountain West ATTC

### Curriculum Infusion Package



## Version 2



# Adapted Products

## Mid-America ATTC

### S.M.A.R.T. Treatment Plan Checklist

Problem Statements	
1. Reflect 7 potential problem areas? (e.g., 1. Medical status; 2. Employment and support; 3. Drug Use; 4. Alcohol use; 5. Legal status; 6. Family/social status; 7. Psychiatric Status)	<input type="checkbox"/>
2. Written in behavioral terms?	<input type="checkbox"/>
3. Written in a non-judgmental/jargon free manner?	<input type="checkbox"/>
4. Based on priority needs?	<input type="checkbox"/>
<b>Goals</b> What does the client want to achieve during treatment?	<input type="checkbox"/>
5. Address the problem statements?	<input type="checkbox"/>
6. Attainable during the active treatment phase?	<input type="checkbox"/>
7. Will the client understand/agree with goals?	<input type="checkbox"/>
8. Would staff agree with goals?	<input type="checkbox"/>
9. Has the client's stage of readiness to change been considered?	<input type="checkbox"/>
<b>Objectives</b> What will the client say or do? Under what circumstances? How often will he/she say or do this?	<input type="checkbox"/>
10. Objectives address the goals?	<input type="checkbox"/>
11. Specific—Specific activities included? Could client understand expectations?	<input type="checkbox"/>
12. Measurable—Can change or progress be documented/evaluated?	<input type="checkbox"/>
13. Attainable—Can the client take steps toward meeting the objectives?	<input type="checkbox"/>
14. Realistic—Can the client meet the objectives given their current situation?	<input type="checkbox"/>
15. Time-Limited—is time frame specified for the objectives?	<input type="checkbox"/>
16. Client's stage of readiness to change considered?	<input type="checkbox"/>
<b>Interventions</b> What will the counselor/staff do to assist client? Under what circumstances?	<input type="checkbox"/>
17. Address the objectives?	<input type="checkbox"/>
18. Specific—Are specific staff persons responsible for assisting client/providing service?	<input type="checkbox"/>
19. Measurable—Will the counselor/treatment program be held accountable for the services?	<input type="checkbox"/>
20. Attainable—Reflect the level of care available or are outside referrals used when needed?	<input type="checkbox"/>
21. Realistic—Reflect the level of functioning or functional impairment?	<input type="checkbox"/>
22. Time-limited—is the time frame specified for the interventions?	<input type="checkbox"/>
23. Client's stage of readiness to change considered?	<input type="checkbox"/>
<b>General Checklist</b>	<input type="checkbox"/>
24. Is this plan individualized to fit the client based on their unique abilities, goals, lifestyle, SES, work history, educational background, and culture?	<input type="checkbox"/>
25. Are client strengths included in the plan?	<input type="checkbox"/>
26. Has the client (and significant others) participated in developing this plan?	<input type="checkbox"/>
27. Is the plan dated/signed by all relevant participants?	<input type="checkbox"/>

## Treatment Plan Checklist

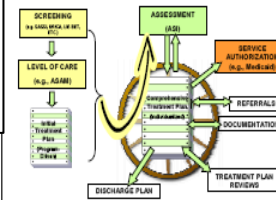
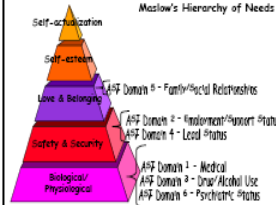
### What is the ASI?

#### Identifies 7 potential problem areas

1. Medical status
2. Employment and support
3. Drug use
4. Alcohol use
5. Legal status
6. Family/social status
7. Psychiatric status



#### Relationship Between ASI Domains & Maslow's Hierarchy of Needs



S.M.A.R.T. Treatment Planning Utilizing the Addiction Severity Index (ASI): Making Required Data Collection Useful!

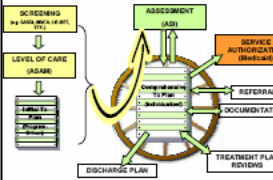
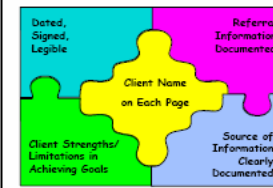
### B.I.R.P. Progress Note Checklist

B Behavior	
Counselor observation, client statements.	<input type="checkbox"/>
1. Subjective data about the client—what are the client's observations, thoughts, direct quotes?	<input type="checkbox"/>
2. Objective data about the client—what does the counselor observe during the session (affect, mood, appearance)?	<input type="checkbox"/>
I Intervention	<input type="checkbox"/>
Counselor's methods used to address goals and objectives, observation, client statements.	<input type="checkbox"/>
3. What is the counselor's understanding about the problem?	<input type="checkbox"/>
4. What are the counselors' working hypotheses?	<input type="checkbox"/>
5. What was the general content and process of the session?	<input type="checkbox"/>
6. Was homework reviewed (e.g., journal, reading assignments—if any)?	<input type="checkbox"/>
7. What goals, objectives were addressed this session?	<input type="checkbox"/>
R Response	<input type="checkbox"/>
Client's response to intervention and progress made toward treatment plan goals and objectives	<input type="checkbox"/>
8. Client's response to the treatment plan, what needs revision?	<input type="checkbox"/>
9. What is the client's current response to the treatment plan?	<input type="checkbox"/>
P Plan	<input type="checkbox"/>
Document what is going to happen next:	<input type="checkbox"/>
10. What in the treatment plan needs revision?	<input type="checkbox"/>
11. What is the counselor going to do next?	<input type="checkbox"/>
12. When is the next session date?	<input type="checkbox"/>
General Checklist	<input type="checkbox"/>
13. Does this note connect to the client's individualized treatment plan?	<input type="checkbox"/>
14. Are client strengths/limitations in achieving goals noted and considered?	<input type="checkbox"/>
15. Is this note dated, signed, and legible?	<input type="checkbox"/>
16. Is client name/identifier included on each page?	<input type="checkbox"/>
17. Has referral information been documented?	<input type="checkbox"/>
18. Does note reflect changes in client status (e.g., GAF Scale, ASI ratings)?	<input type="checkbox"/>
19. Are any abbreviations used standardized and consistent?	<input type="checkbox"/>
20. Would someone not familiar with this case be able to read this note and understand exactly what has occurred in treatment?	<input type="checkbox"/>
21. Are any non-routine calls, missed sessions, or professional consultations regarding this case documented?	<input type="checkbox"/>
22. Did counselor/supervisor sign note?	<input type="checkbox"/>

Developed by Mid-America Addiction Technology Transfer Center  
P. Stien/A. Wender (2005)

## Documentation Checklist

### Documentation - Basic Guidelines



### B.I.R.P. Method of Documentation

- B**ehavior - counselor's observations, client statements
- I**ntervention - counselor's methods used to address goals and objectives
- R**esponse - client's response to intervention and progress made toward tx plan goals and objectives
- P**lan - next steps in achieving treatment goals and objectives

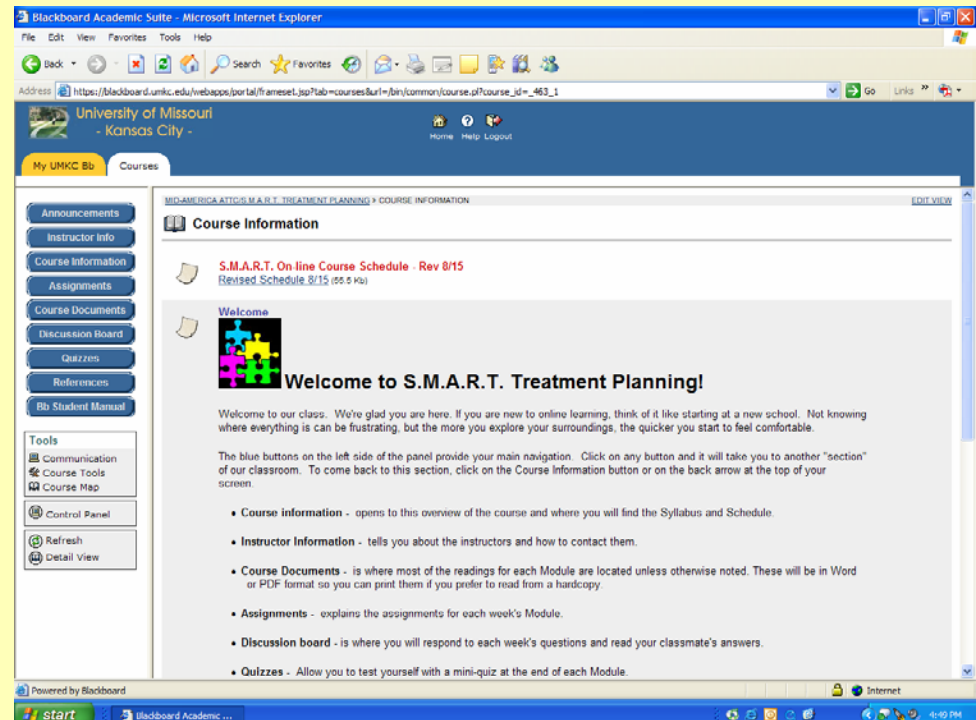
S.M.A.R.T. Treatment Planning Utilizing the Addiction Severity Index (ASI): Making Required Data Collection Useful!

# Adapted Products

## Mid-America ATTC

### Version 3 On-line Course – 6 week course

- Designed in Blackboard
- Focus on skill development and application in clinical setting (12 hours)



The screenshot shows a web browser window displaying the Blackboard Academic Suite interface. The browser title is "Blackboard Academic Suite - Microsoft Internet Explorer". The address bar shows the URL: [https://blackboard.umkc.edu/webapps/porta/frameset.jsp?tab=courses&url=/bin/common/course.pl?course\\_id=463\\_1](https://blackboard.umkc.edu/webapps/porta/frameset.jsp?tab=courses&url=/bin/common/course.pl?course_id=463_1). The page header includes the University of Missouri - Kansas City logo and navigation links for Home, Help, and Logout. Below the header, there are tabs for "My UMKC Bb" and "Courses".

The main content area is titled "MID-AMERICA ATTC (S.M.A.R.T. TREATMENT PLANNING) > COURSE INFORMATION". On the left side, there is a vertical navigation menu with buttons for: Announcements, Instructor Info, Course Information, Assignments, Course Documents, Discussion Board, Quizzes, References, and Bb Student Manual. Below this menu is a "Tools" section with buttons for Communication, Course Tools, Course Map, Control Panel, Refresh, and Detail View.

The main content area displays the following information:

- S.M.A.R.T. On-line Course Schedule - Rev 8/15**  
Revised Schedule 8/15 (65.5 kb)
- Welcome**  
Welcome to our class. We're glad you are here. If you are new to online learning, think of it like starting at a new school. Not knowing where everything is can be frustrating, but the more you explore your surroundings, the quicker you start to feel comfortable.
- The blue buttons on the left side of the panel provide your main navigation. Click on any button and it will take you to another "section" of our classroom. To come back to this section, click on the Course Information button or on the back arrow at the top of your screen.
- Course information** - opens to this overview of the course and where you will find the Syllabus and Schedule.
- Instructor Information** - tells you about the instructors and how to contact them.
- Course Documents** - is where most of the readings for each Module are located unless otherwise noted. These will be in Word or PDF format so you can print them if you prefer to read from a hardcopy.
- Assignments** - explains the assignments for each week's Module.
- Discussion board** - is where you will respond to each week's questions and read your classmate's answers.
- Quizzes** - Allow you to test yourself with a mini-quiz at the end of each Module.

The footer of the page indicates "Powered by Blackboard" and the system time is 1:49 PM.



**I learned...**

## **Training Participant Comments**

- **The client has a better understanding & feels more in control**
- **Staff has more clarity & understanding regarding the mechanics of paperwork**
- **This course reminded me to not leave out other issues like employment, medical problems, etc**
- **I actually had to go back to the ASI and review because I had forgotten some of those issues**
- **I have always considered strengths & stage of change when writing plans but this course helped me to focus**





The  
ASI?

But...Before we get to the ASI....

Additional activities with  
S.M.A.R.T. Treatment Planning

R01 Submission  
S.M.A.R.T. TP Software  
International Uses

# R01 Grant Submission

For submission Winter 2007  
Carise, Stilen, Roget, Freeze

	No supervision sessions	Plus 12 ½ hour supervision sessions
In-person Training	TAU	TAU +
Web-Based Training	WEB	WEB +

# UNODC, UCLA & TRI

## The Treatnet Project International Network of Treatment and Rehabilitation Resource Centers

# Capacity Building Plan

Goal: Develop capacity building and training for substance abuse (SA) treatment and rehabilitation in 20 resource centers, 12 in disadvantaged regions

# Treatnet Group

Brazil

Iran

Colombia

Kazakhstan

China

Kenya

Egypt

Mexico

India

Nigeria\*\*

Indonesia

Russia

# \*\*Researchers gone wild



# Back to “Why use the ASI?...”

## Top 10 Reasons to Use the ASI for Clinical and Treatment Care Planning Purposes

# Reason # 10

- Reliable and valid measures of patients' problems

(McLellan, et. al., 1980; 1985; 1992;  
Kosten, Rounsaville & Kleber, 1987)

# What?

What do you mean  
we're unreliable?

Statistically  
Speaking....

# Why Standardize: The Blood Pressure Model

**A sphygmomanometer is used to measure arterial blood pressure.**



# Example:

## Non-standardized Reporting

### **Blood Pressure**

Nurse 1 – It's getting better

Better than what??

Nurse 2 – It's much lower than before

Too low??

Nurse 3 – The patient is in denial (???)

Nurse 4 – The patient is non-compliant, lets not treat him until he's really ready.

# Example:

# Standardized Reporting

## **Blood Pressure**

Nurse 1 – It's 120/80

Nurse 2 – It's 116/78

Nurse 3 – It's 122/82

Nurse 4 – The patient is non-compliant, lets not treat him until he's really ready.

# Reason # 9

- There are well-specified training procedures

(Fureman, McLellan, & Alterman, 1994)

# Reason # 8

- The ASI can be automated: useful for counselors and program directors.

(DENS, Carise et. al. 1999)

# Reason # 7

- The ASI can inform patient care and can lead to better outcomes
- Philadelphia Target Cities Project
- Clients received “...significantly more services and significantly better outcomes...”

(See McLellan, Hagan, Levine, et. al. 1999, etc)

# Reason # 6

- Research has shown:  
Problem-Services matching leads to better retention and better outcomes

(McLellan et al, 1999; 1993; Kosten, Rounsaville & Kleber, 1987, Hser et al; 1999)

# Reason # 5

- Adequate problem assessment and offer of effective services lead to increased confidence and increased likelihood of participation (retention)

(Higgins et al, 1994, 1995; Meyers & Smith, 1995)

# Reason # 4

- Using the ASI, studies have shown that problem-services matching improves outcomes in public addiction treatment.

(McLellan, Hagan, Levine, et. al. 1999;  
McLellan, Arndt, et. al., 1993;  
Luborsky, McLellan et. al., 1985)

# Reason # 3

- If patients' problems are accurately assessed, they may feel “heard” by their counselor potentially leading to greater rapport and stronger helping alliance.

(Luborsky et. al., 1996; Luborsky, Crits Christoph, McLellan, & Woody, 1986; Barber et.al, 1999, 2001)

# Reason # 2

## ASI allows for better Patient-Services Matching

- 6 treatment programs and 389 patients
- Superior performance during treatment and 6-month outcomes.

McLellan, Woody, Luborsky, et. al. (1983)  
Journal Nervous and Mental Diseases

# Reason # 1

- A recent study showed that when counselors use the ASI with a computer assisted resource guide, patients received more and better matched services and stayed in treatment longer.

(Carise, Gurel, Kendig & McLellan. 2005. DAD; Gurel, Carise & McLellan, 2005, JSAT)

**What could be done  
to increase  
the resources available  
and the  
problem-services match  
at  
treatment programs?**

Transforming DATA into

INFORMATION

for

Patients, Counselors,  
Program Directors and  
Policy Makers

# THE CASPAR STUDY

Computer Assisted System

for

Patient Assessment and Referrals

**# R01 DA13134-01**

D. Carise at Treatment Research Institute, PI

# Background

- Wrap-Around social services have been shown to improve treatment outcomes

But.....

- Finding “wrap-around” services can be time-consuming and costly for counselors
- Computer technology could make a user-friendly resource guide for locating and referring patients to needed services

# Problem-Services Linkage: An example with employment services

- Alcohol

- Drugs

- Medical

- **Employment**

- Psychiatric



GED training

The diagram consists of a light blue rectangular area on the left containing a list of five categories. The category 'Employment' is highlighted in dark blue. Five black arrows originate from the right side of the 'Employment' text and point to five corresponding service items listed on the right side of the slide.

Resume Development

Job Finding

Mentoring Sessions

Training Loans

# Software Screen Example

## PROGRAM KEYWORD SEARCH

[Return To Main Menu](#)

From this screen you can search the database of agencies by keywords describing the programs offered. Select the City/Zip code nearest you or your client. The system will display the approximate distance from that city to the location of the agency or program.

Highlight a keyword here.

keyword	# of Programs
Abuse, Child	3
Abuse, Older Adults/Seniors	1
Advocacy	10
After-school Programs	127
AIDS	15
AIDS Testing	6
Alzheimer's Disease	4
Boarding Home	2
Cancer	14

Click here for all services matching the keyword.

Click here to enter patient's zip code.

# Software Screen Example

## PROGRAM INFORMATION

[Return To Previous Screen](#)

**Program Name:** Workstart

**Agency:** Community Women's Education Project

**Program Information:** Basic skills and literacy education including reading, writing, math, computers and career classes and support services. Classes are 36 weeks long, but students can stay as long as needed. Application required.

**Eligibility:** Desire to upgrade academic skills.

**Fees:** No Fee

2801 Frankford Ave.

Philadelphia, PA 19134

**Phone:** (215) 426-2200

**FAX:** (215) 426-3284

**Hours:** Mon-Fri 9:30am-2pm

**Intake Procedure:** None

**Languages:** English

**Genders Served**

**Ages Served:** 0-6 7-12 13-18 19-25 26-59 60+

**Male:**  **Female:**

**Handicap Access:**

**Transportation:** Market & Frankford El; Buses: #5 and #54

Print

Go To Agency

Click here to print this page.

Click here to view other programs provided by this agency.

# Study Design

**Group 1 - SA**  
**5 Programs**  
**Standard**

**Group 2 - EA**  
**5 Programs**  
**Enhanced**

**10 Programs**

**15**  
**Counselors**

**18**  
**Counselors**

**33**  
**Counselors**

**57**  
**Patients**

**74**  
**Patients**

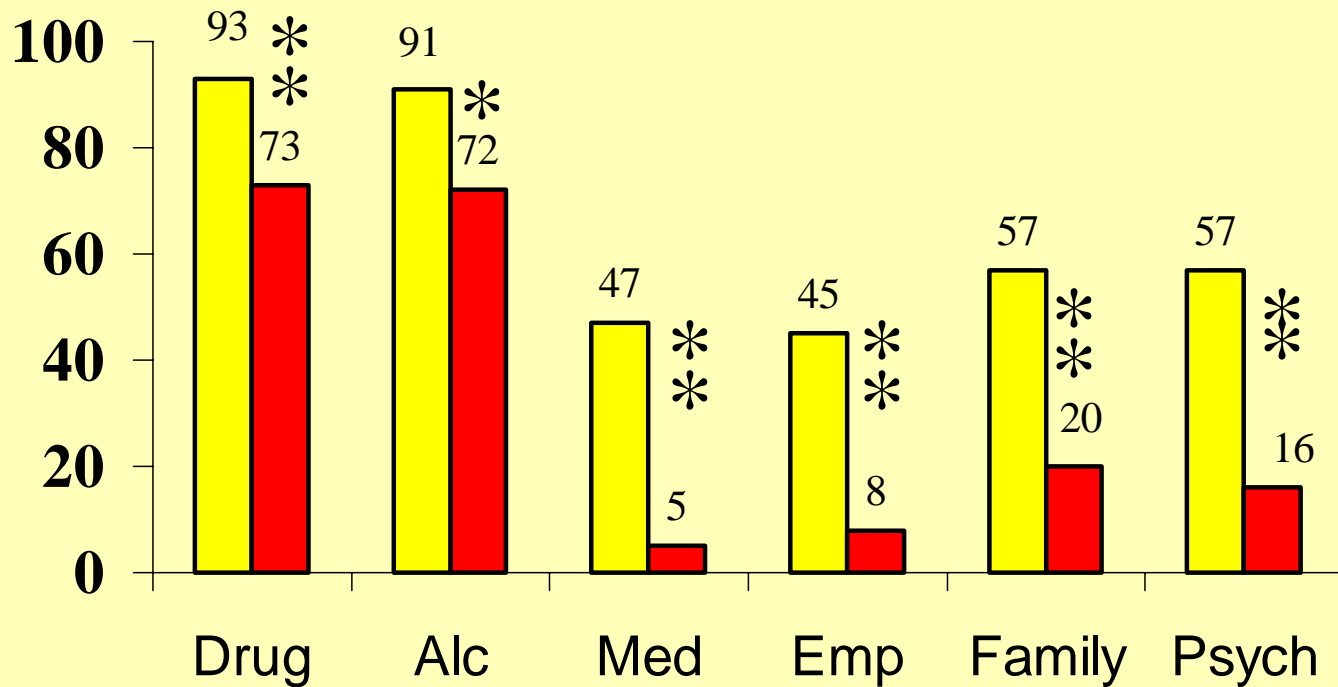
**131**  
**Subjects**

# Hypothesis 1

- Counselors trained in the Resource Guide will develop Treatment Care Plans that are better matched to patients' needs.

# % Matched: ASI to TCP

For those who needed services as indicated in their ASI:



■ Enhanced Assessment Group ■ Standard Assessment Group

\*p < .05

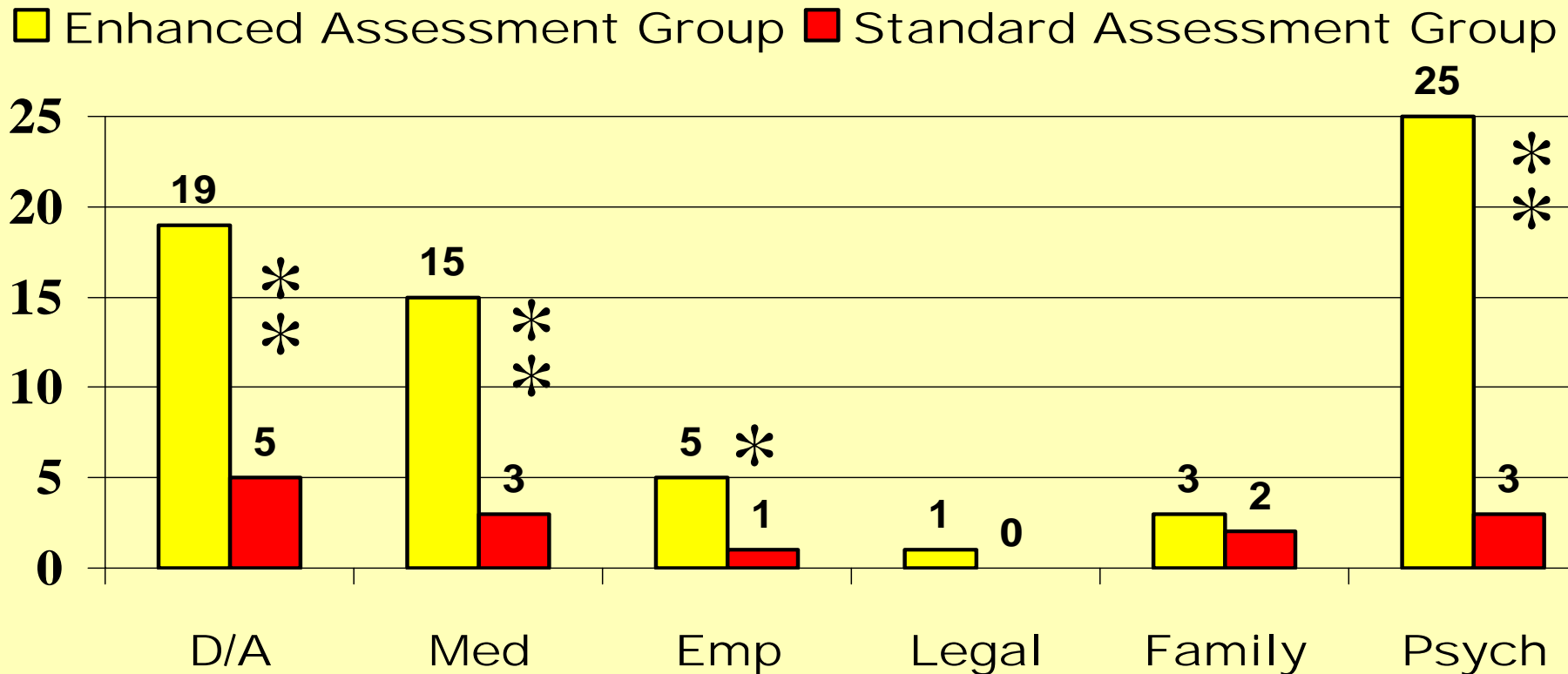
\*\*p < .01

# Hypothesis 2

Patients whose counselors receive the EA Training will receive more services



# Mean Number of Services Received



\* $p < .05$

\*\* $p < .01$

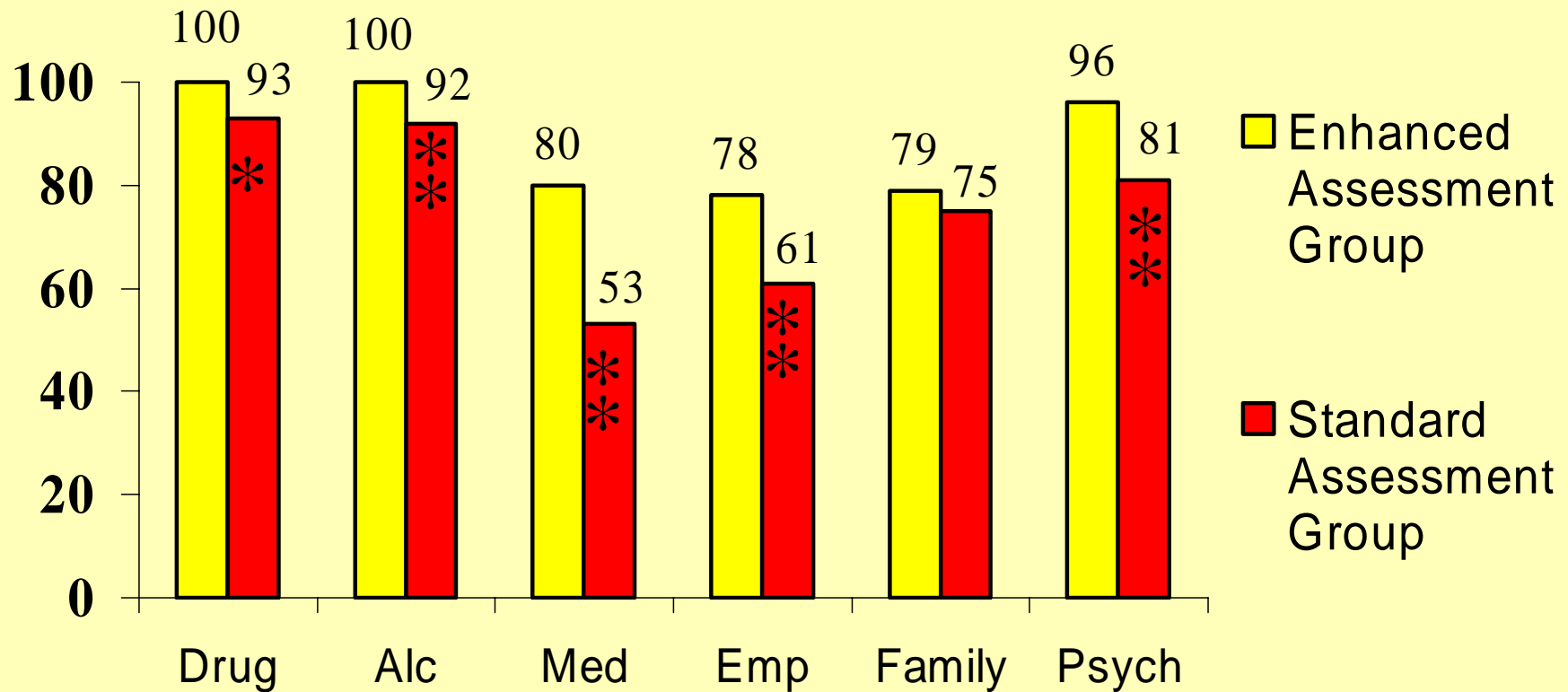
# Hypothesis 3

Patients whose counselors receive the EA Training will receive Treatment Services that better match their problems identified at admission.



# % Matched: Problems to Total Services Received

For those who needed services as indicated in their ASI:



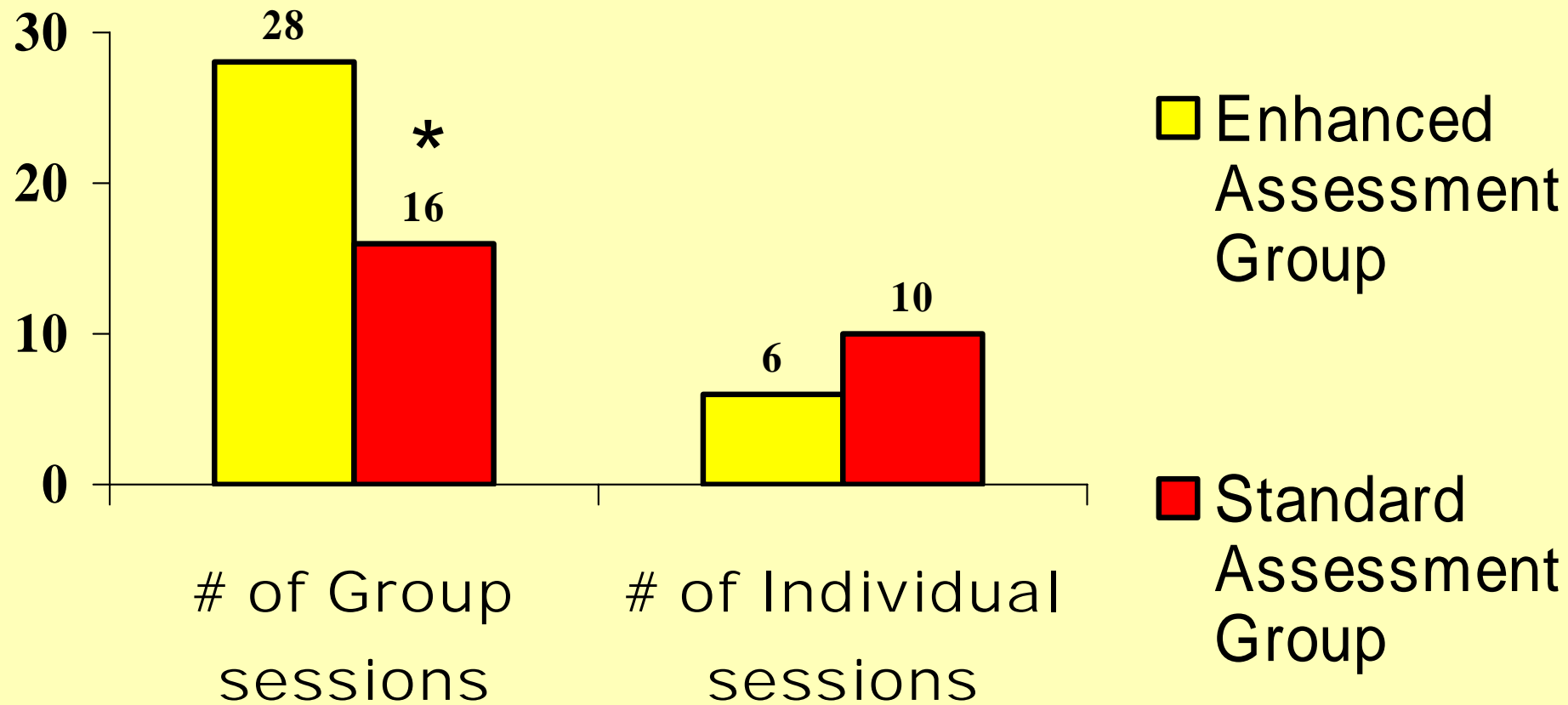
\*p<.05

\*\*p<.01

# Hypothesis 4

- **Patients of counselors trained on the Resource Guide will have greater session attendance**

# # of Session Attended (program records)

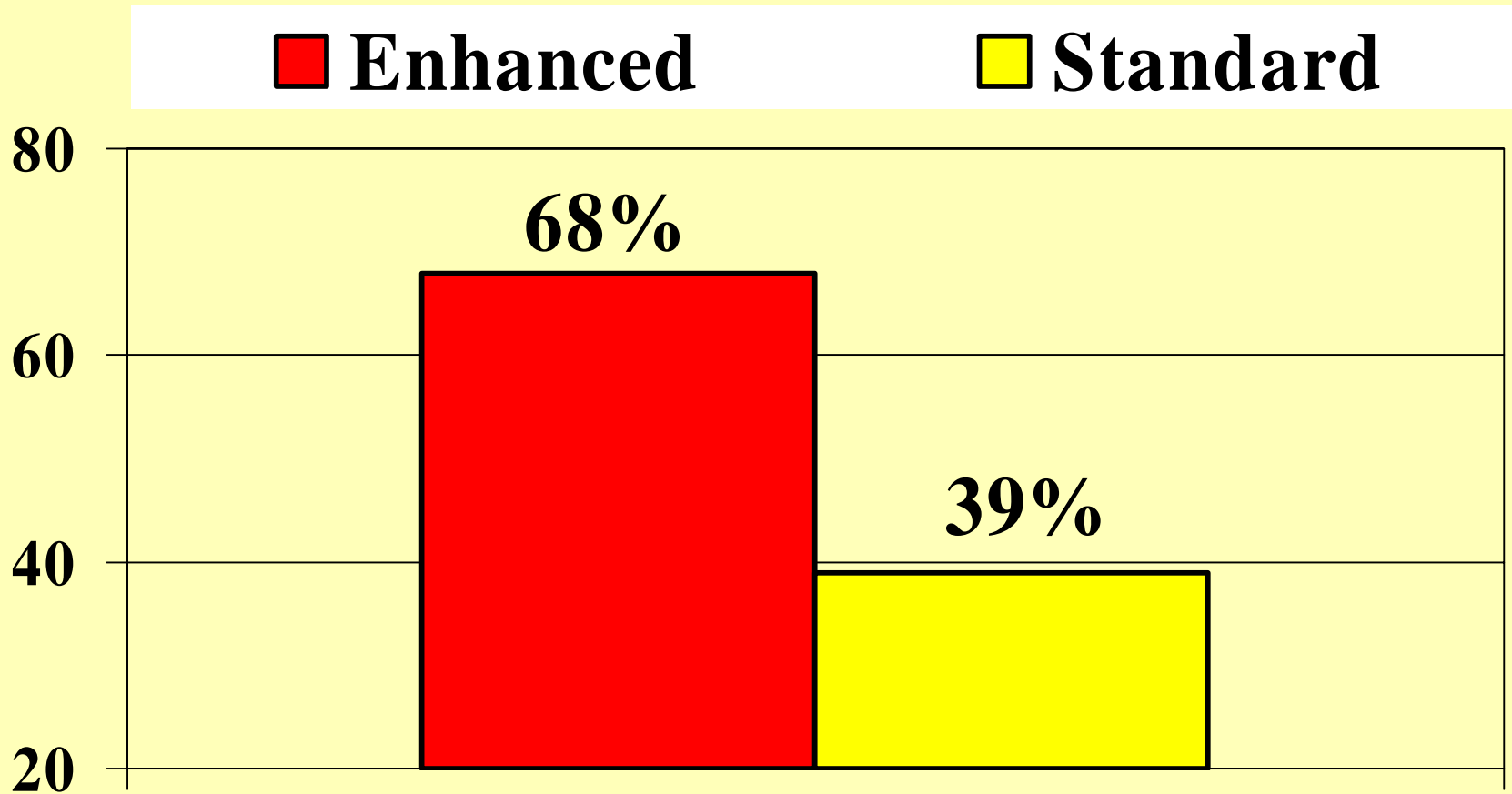


\* $p < .05$

# Hypothesis 5

- Patients whose counselors receive the EA Training will remain in treatment longer and be more likely to complete treatment

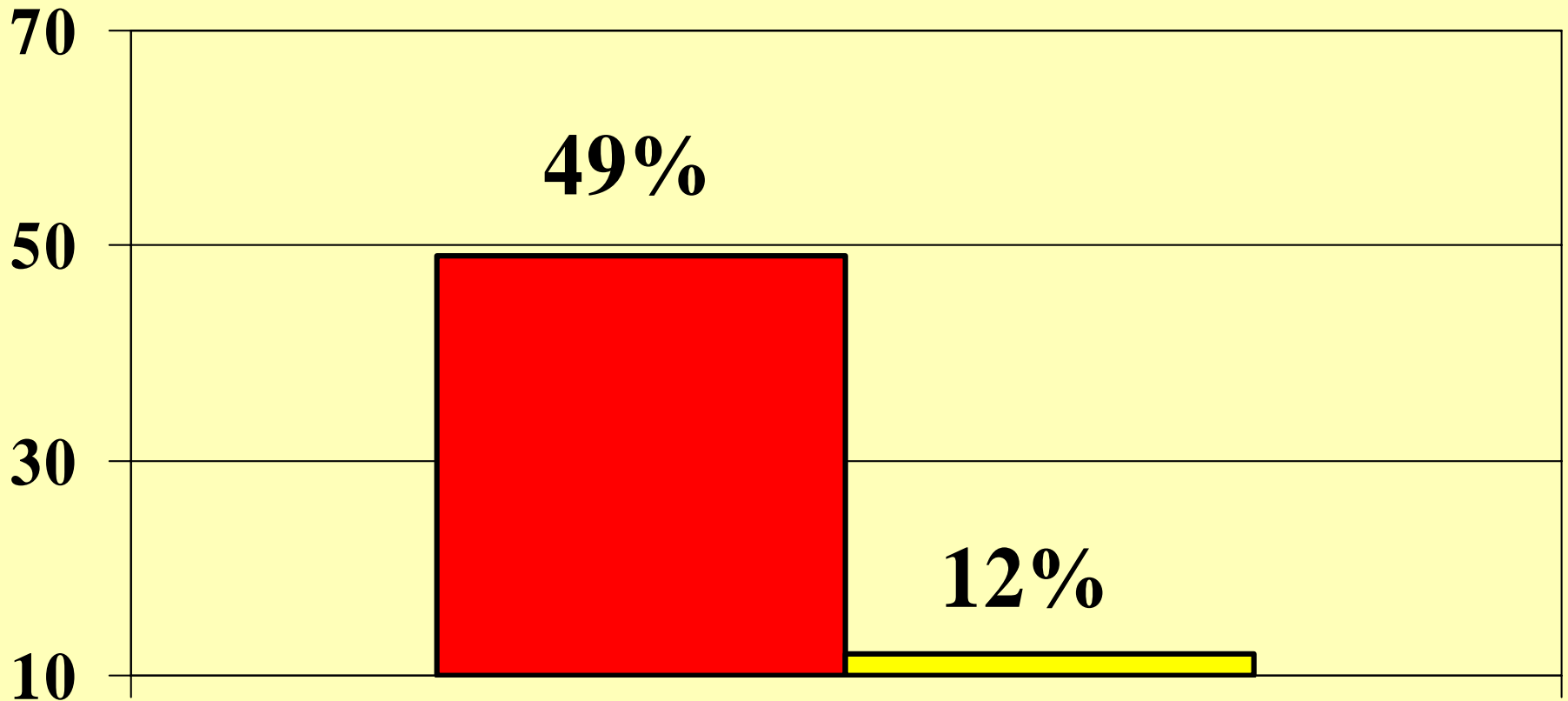
# % Retained at 45 Days



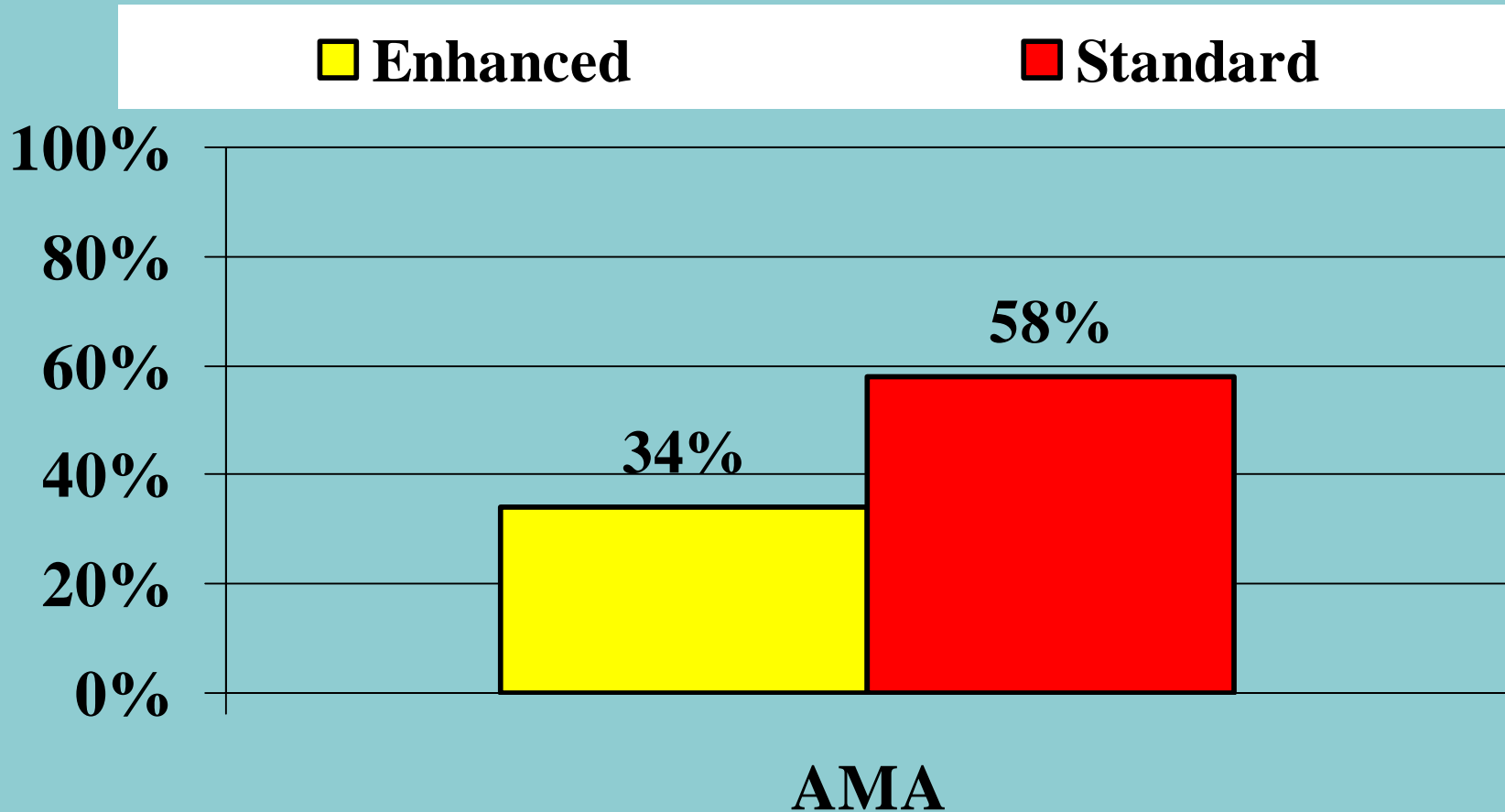
# % Retained at 90 Days

**■ Enhanced**

**■ Standard**



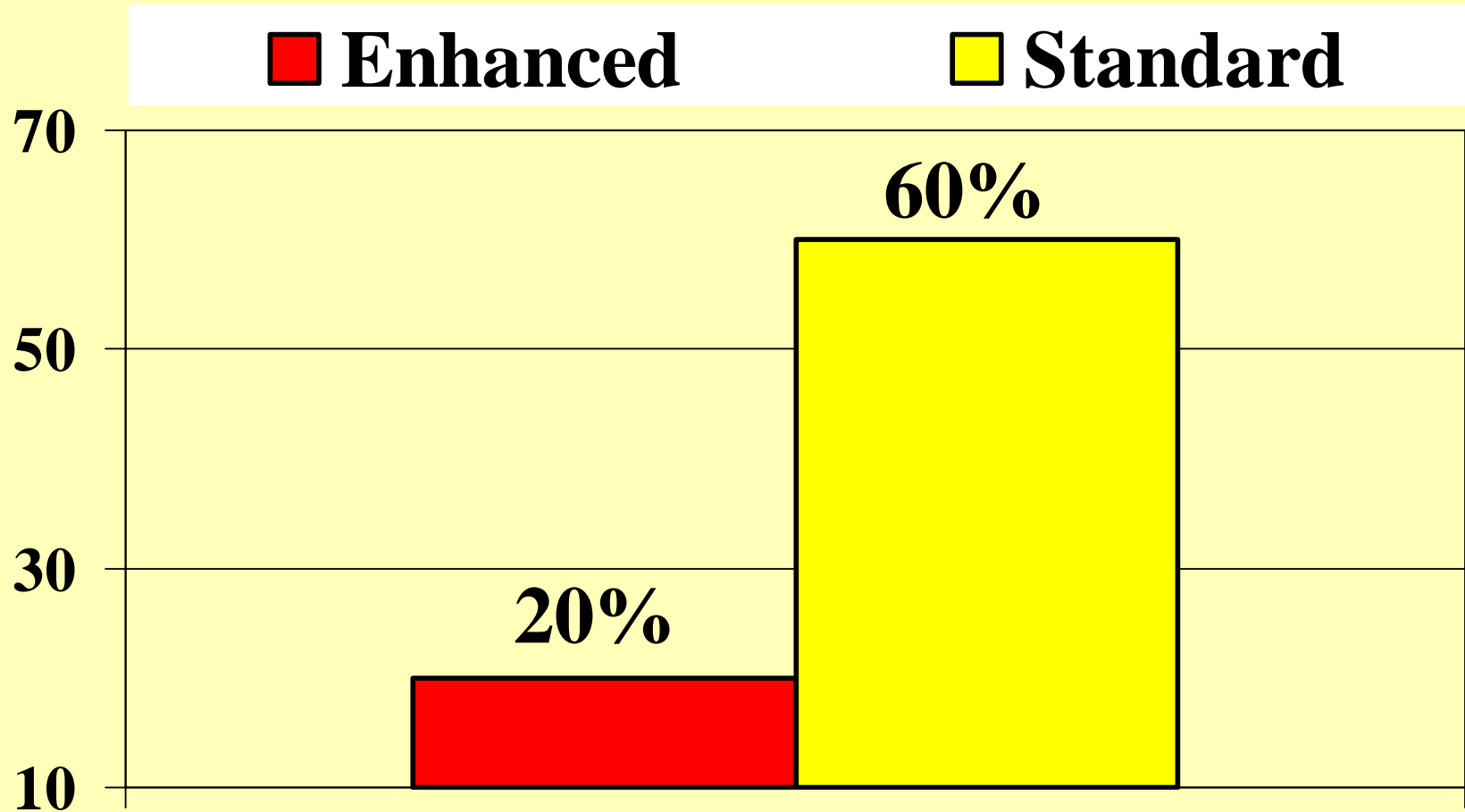
# % Left AMA



# Interesting Data

- Counselors who received the EA Training remained on the job longer.

# % No longer doing intakes 6 months later



# **Evergreen Treatment Services**

- **Private non-profit community-based agency**
- **Provide out-patient opioid treatment since 1973**
- **Approximately 1100 patients in 4 facilities and a mobile van service**

# Identify a Problem

**“Moving to evidenced-based practices”**

- **Track systematically the nature of patients and their presenting problems**
- **Match treatment services to unmet patient needs**
- **Track patient outcomes for program evaluation and for funding and political purposes**

# Identify Outcomes

- ✓ **Conduct all intakes using the Addiction Severity Index (ASI) – a multi-dimensional standardized assessment tool**
- ✓ **Have ASI intake data stored in agency database**
- ✓ **Use ASI information as initial treatment planning guide**
- ✓ **Use ASI data for program evaluation**

# Assess the Organization

- ✓ **All intake workers will need training in ASI administration and then on-going Q.A. for reliability.**
- ✓ **All intake workers will need training on computerized ASI.**
- ✓ **Treatment supervisors and counselors will need training in how to interpret ASI assessment.**
- ✓ **Counselors will need supervision to insure their using unmet need identified at intake in treatment planning and delivery.**
- ✓ **I.T. Coordinator will need to maintain database.**

# Assess the Audience

## ✓ **Regulatory agencies**

- **CSAT – accreditation**
- **DASA – WAC certification & accreditation**

## ✓ **Funding sources**

## ✓ **Political entities**

## ✓ **Board of Directors**

## ✓ **Staff**

## ✓ **Research Community**

# Identify the Approach

## ✓ Training

- Intake staff
- Counselors & supervisors
- IT Coordinator

## ✓ Acquire resources

- ASI Software
- Desktop computers

## ✓ Oversight

# Implement the Plans

- ✓ **Training – don't underestimate time necessary for this component. Skill building can't be rushed**
- ✓ **Resource acquisition – make sure you forecast all of the necessary expenses**
- ✓ **Pay attention to staff concerns and morale**

# Evaluate the Plans

- ✓ **Are the systems and processes working as designed?**
- ✓ **Are the data generated capable of being analyzed as envisioned?**
- ✓ **Is the information clinically useful?**
- ✓ **Are the reports useful to management?**
- ✓ **How has this change benefited the agency and its patients?**