

Treatment of Adolescent Marijuana Abuse: A Randomized Clinical Trial

Structure of the Cannabis Youth Treatment Study

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Funded by:

The Center for Substance Abuse Treatment (CSAT)

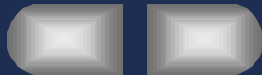
Substance Abuse and Mental Health Services Administration (SAMSHA)

U. S. Department of Health & Human Services (DHHS)



CYT is....

- a multi-site randomized field experiment examining five outpatient treatment protocols for adolescents who abuse or are dependent on marijuana
- the largest adolescent substance abuse treatment experiment ever undertaken
- a key component of U.S. Secretary Donna Shalala's "Youth Initiative" to address rising rates of marijuana use among adolescents in the United States



CYT



Cannabis Youth Treatment: A Collaborative Study of the Effectiveness of Treatment for Cannabis use Disorders



Sponsored By:
Center for Substance Abuse Treatment (CSAT),
Substance Abuse and Mental Health Services Administration (SAMHSA),
U.S. Department of Health and Human Services (DHHS)



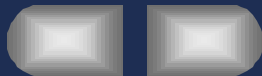
Purpose of SAMHSA/CSAT CYT Cooperative Agreement

-  **To test the relative effectiveness and cost-effectiveness of five promising interventions targeted at reducing/eliminating marijuana use and associated problems in adolescents**
-  **To provide validated models of these interventions to the treatment field**



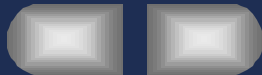
Planning Questions

- **What are promising models of outpatient treatment for adolescents with cannabis use disorders?**
- **What are the characteristics and co-occurring problems of participants presenting for treatment?**
- **What do we know about the costs and/or cost constraints on adolescent treatment?**



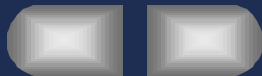
Core Study Questions

- **What level of behavioral change and/or family involvement occurred during treatment?**
- **What services do participants actually receive and to what extent did they receive the services specified in the manual?**
- **Do the treatment models differ in their effectiveness during and after treatment in terms of marijuana use, alcohol use, behavior/cognitive problems, school problems and illegal activity?**



Economic & Policy Questions

- What were the average accounting and economic costs of providing each treatment model to the participant?
- Relative to the briefer and less expensive intervention used across sites, do the more intensive/expensive interventions tested in each site vary in their cost-effectiveness in terms of days of marijuana use, alcohol use, behavior/cognitive problems, school problems and illegal activity?
- Do the clinical effectiveness, cost and/or cost-effectiveness appear to vary for specific subpopulations (e.g., by gender, substance use severity, level of criminal justice system involvement, comorbid mental health issues, environmental problems).



CYT Interventions

Incremental Arm

MCB5

MC12

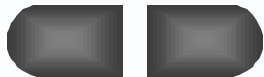
FSNM

Alternative Arm

MCB5

ACRA

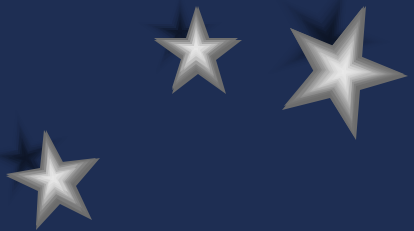
MDFT





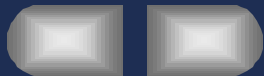
Target Population

Adolescents with cannabis use disorders of abuse or dependence as defined by DSM-IV criteria and who are appropriate for outpatient settings



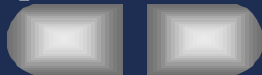
Inclusion Criteria

- be 12 to 18 years old
- meet criteria for current DSM-IV diagnosis of cannabis abuse or dependence
- have used marijuana in the past 90 days
- meet ASAM (1996) patient placement criteria for level I (outpatient) or level II (intensive outpatient) if low severity case



Exclusion Criteria

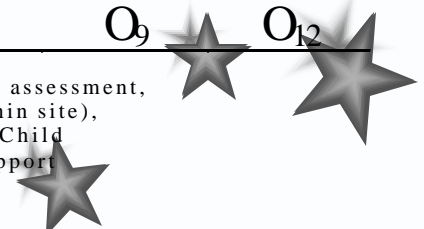
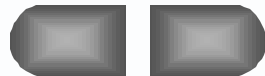
- alcohol use more than 45 of past 90 days
- other drug use more than 13 of past 90 days
- acute medical condition
- acute psychological condition
- insufficient mental capacity
- live outside of the program's catchment area
- history of violent/predatory behavior
- insufficient ability to use English
- parent/collateral insufficient ability to use English
- previously participated in the study



Research Design

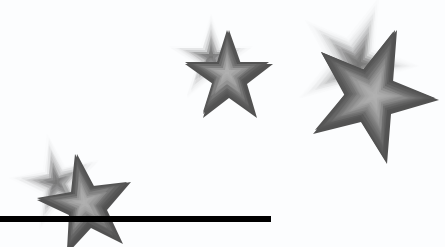
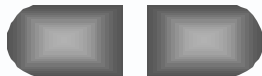
Site	Treatment	N	-----Months from Intake-----					
			0*	RA	3*	6*	9	12 [#]
ARC	MET/CBT 5	50	O ₀	T _{MCB5}	O ₃	O ₆	O ₉	O ₁₂
	MET/CBT12	50	O ₀	T _{MC12}	O ₃	O ₆	O ₉	O ₁₂
	FSN/MET/CBT12	50	O ₀	T _{FSNM}	O ₃	O ₆	O ₉	O ₁₂
PAR	MET/CBT 5	50	O ₀	T _{MCB5}	O ₃	O ₆	O ₉	O ₁₂
	MET/CBT12	50	O ₀	T _{MC12}	O ₃	O ₆	O ₉	O ₁₂
	FSN/MET/CBT12	50	O ₀	T _{FSNM}	O ₃	O ₆	O ₉	O ₁₂
CHS	MET/CBT 5	50	O ₀	T _{MCB5}	O ₃	O ₆	O ₉	O ₁₂
	ACRA	50	O ₀	T _{ACRA}	O ₃	O ₆	O ₉	O ₁₂
	MDFT	50	O ₀	T _{MDFT}	O ₃	O ₆	O ₉	O ₁₂
CGC	MET/CBT 5	50	O ₀	T _{MCB5}	O ₃	O ₆	O ₉	O ₁₂
	ACRA	50	O ₀	T _{ACRA}	O ₃	O ₆	O ₉	O ₁₂
	MDFT	50	O ₀	T _{MDFT}	O ₃	O ₆	O ₉	O ₁₂

Notes: O: Primary Observation, T: Treatment, number/subscript: month from intake, *: includes urine and collateral assessment, #: half of sample will receive 12 month assessment, RA: Random assignment, - - : site difference (randomization within site), ARC: Alcohol Research Center, PAR: Operation PAR, CHS-MC: Chestnut Health Systems Madison County, CGC: Child Guidance Center, MET: Motivational Enhancement Treatment, CBT: Cognitive Behavior Therapy, FSN: Family Support Network, ACRA: Adolescent Community Reinforcement Approach, MDFT: Multidimensional Family Therapy.



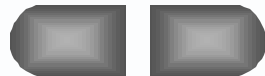
Participant Data Sources

	Pre	I	Tx	3 M	6 M	9 M	12 M
	IP	IP	SR	IP	IP	PH	PH
Participant Screening Form (PSF)	X						
Informed Consent	X						
Global Appraisal of Individual Needs (GAIN-I)		X					
Global Appraisal of Individual Needs (GM90)				X	X	X	X
Supplemental Assessment Form-Intake (SAF-I)		X					
Supplemental Assessment Form-Follow-up (SAF-F)				X	X	X	X
EZ-Screen Urine Tests for THC, Cocaine		X	X	X	X		
Follow-up Locator Form-Participant (FLF-P)		X					
Follow-up Releases-Participant		X					
Working Alliance Inventory-Participant (WAI-P)			X				



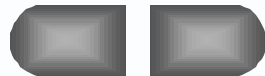
Collateral Data Sources

	Pre	I	Tx	3 M	6 M	9 M	12 M
Informed Consent	IP X	SR	SR	SR	SR		
Collateral Assessment Form (CAF-I)		X					
Collateral Assessment Form-Follow-up (CAF-F)				X	X		
Child Behavior Checklist (CBCL)		X					
Follow-up Locator Form-Collateral (FLF-C)		X					
Follow-up Releases-Collateral		X					
Working Alliance Inventory-Collateral (WAI-C)			X				



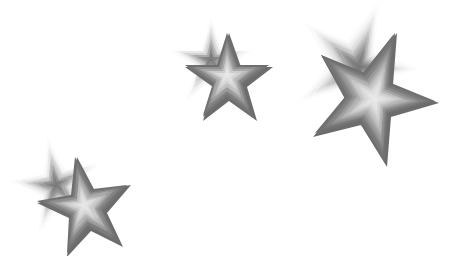
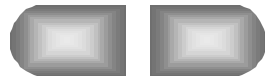
Therapist Data Sources

	Pre	I	Tx	3 M	6 M	9 M	12 M
			SR				
Service Contact Logs (SCL)			X				
Therapist Skillfulness Scales (TSS)			X				
Working Alliance Inventory- Therapist/Participant (WAI-T)			X				
Working Alliance Inventory- Therapist/Collateral (WAI-TC)			X				
Discharge Questionnaire (DQT)			X				

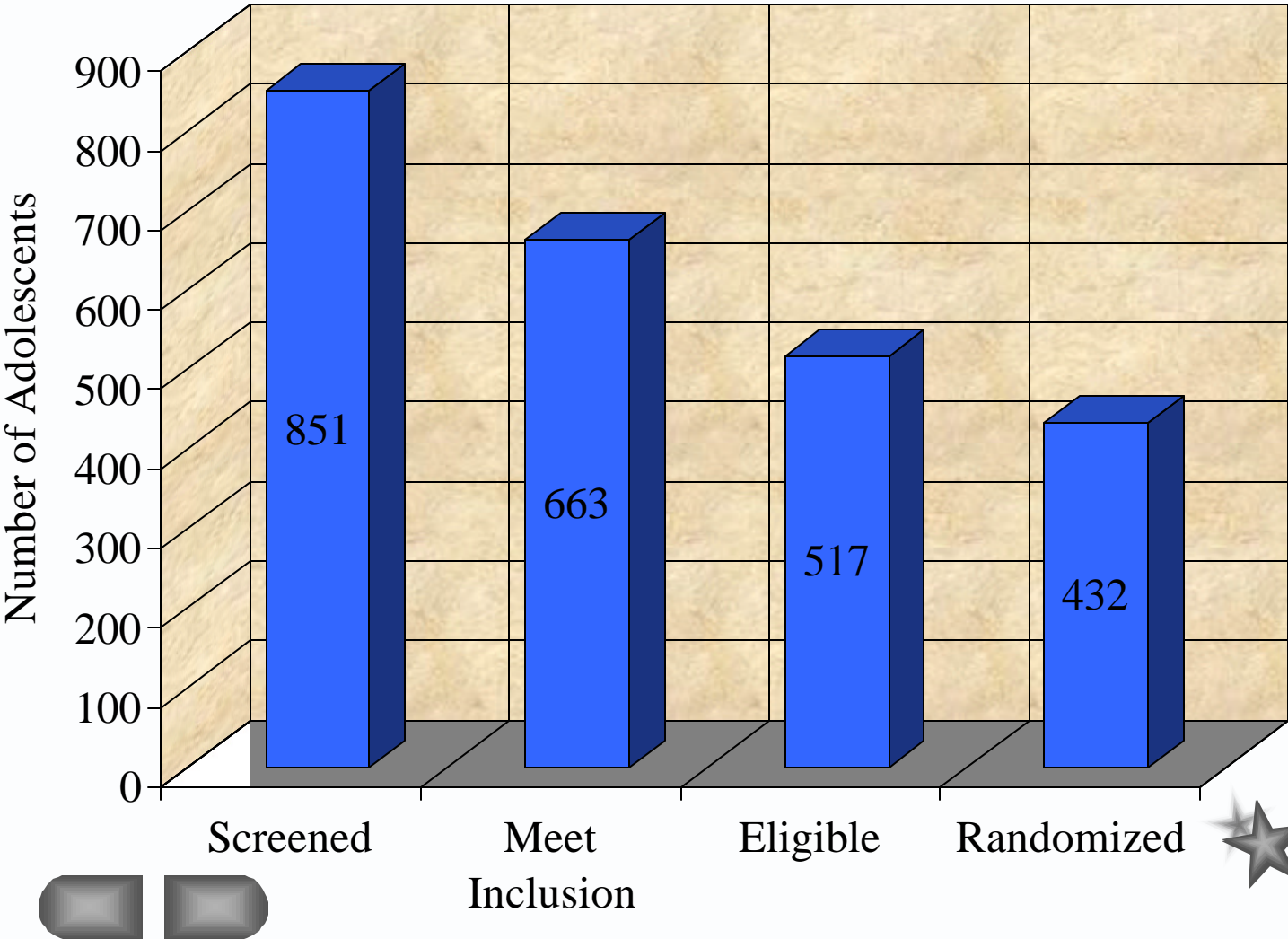


Economic Analysis Data Source

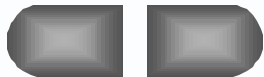
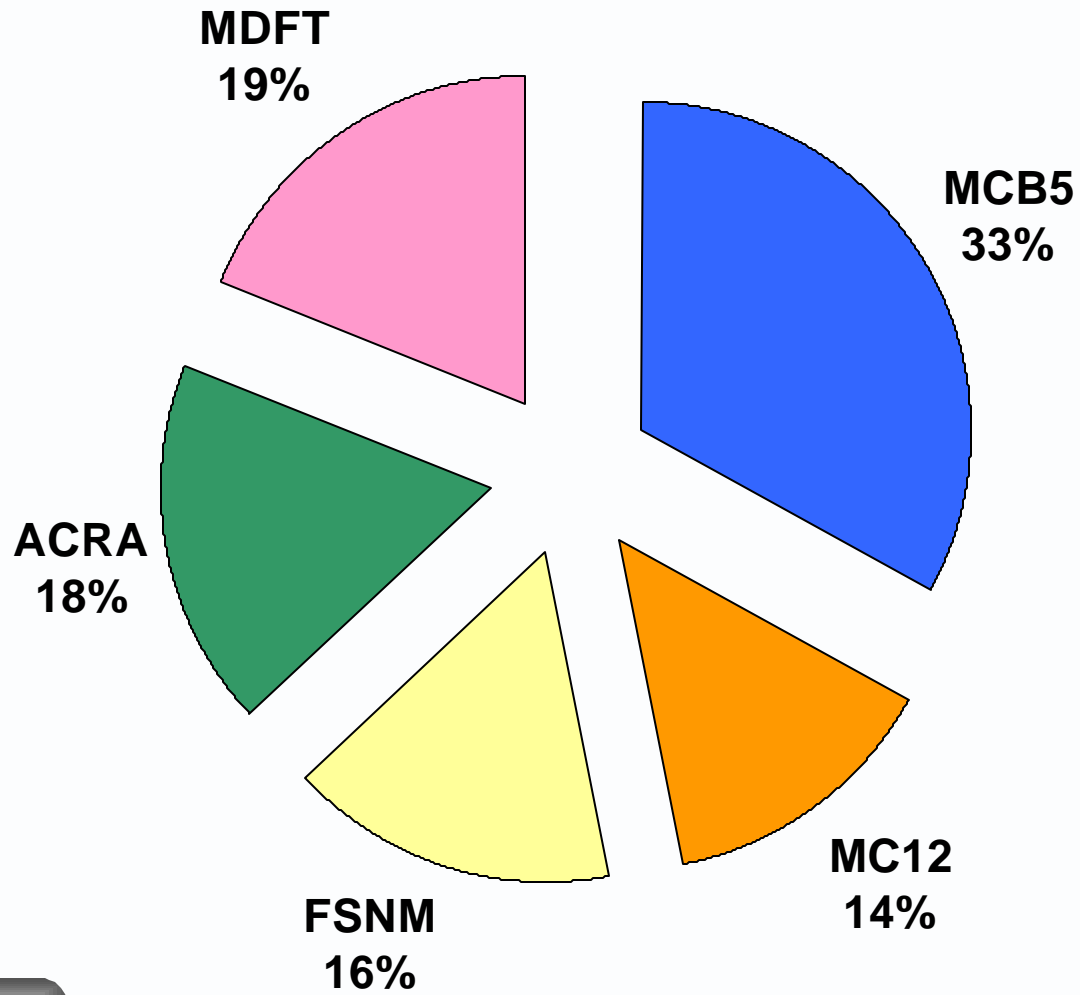
- **Drug Abuse Treatment Cost Accounting Program (DATCAP)**
- **Software measures both accounting costs and economic value**
- **Data will allow standardized estimates across CYT sites and comparisons with adult cost studies**



Pre-inclusion Attrition Pipeline as of 7-26-99

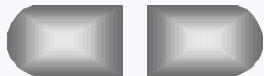


Treatment Distribution as of 7-26-99



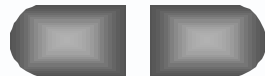
Treatment Status as of 7-26-99

- **Of the 432 adolescents assigned to treatment, approximately 72% have been discharged.**
- **Of those who have been discharged, approximately 72% have successfully completed the core components of the interventions.**



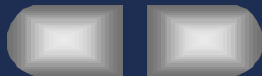
Follow-up Rates as of 7-26-99

	Participant	Collateral
3 month	99	99
6 month	96	98
9 month	96	--
12 month	100	--



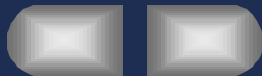
Timeline

- 3 Year Study (10/1997-9/2000)
- Design & Training (10/97-5/98)
- Recruitment (6/1998-11/1999)
- Treatment (6/1998-2/2000)
- 3, 6 & 9 Month Follow-ups (9/1998-8/2000)
- 12 Month Follow-ups - N=300 (6/1999-4/2000)
- Cost Data Collection (1/1999-6/1999)
- Analyses & Interim Reports (3/1998-9/2000)
- Final Report (9/2000)



Next Steps

- Complete recruitment by the end of 1999
- Complete treatment early in 2000
- Complete follow-up by summer 2000
- Possibility for longer-term follow-up



For more information....

- <http://www.chestnut.org/li/cyt>

