

The Effectiveness of Adolescent Substance Abuse Treatment



Michael Dennis, Ph.D.

Chestnut Health Systems, Bloomington, IL

Mady Chalk, Ph.D.

Center for Substance Abuse Treatment, Rockville, MD

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Goals of this Presentation

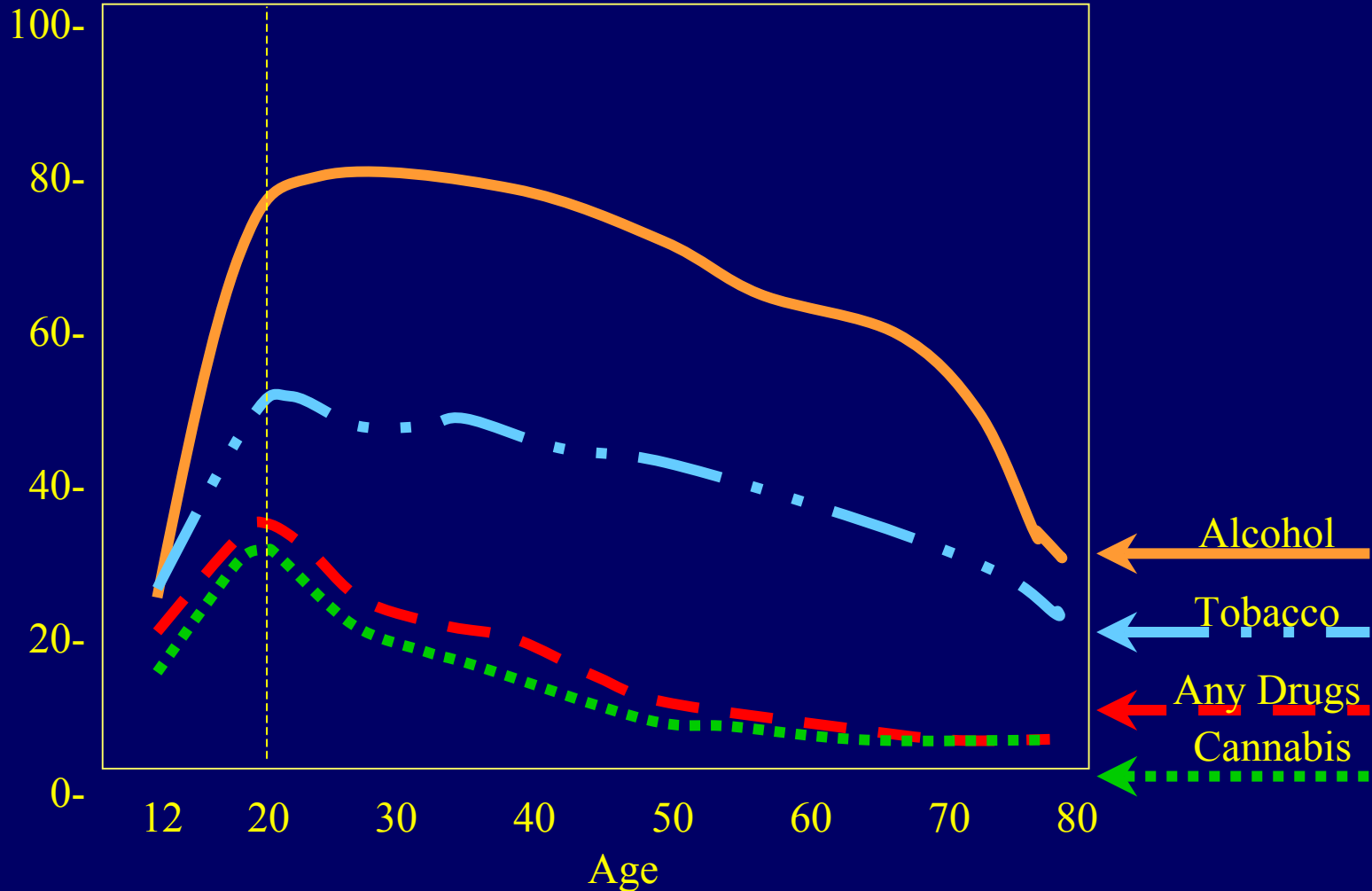


- **Review the prevalence, course, and consequences of adolescent substance use**
- **Describe the major trends in the adolescent treatment system**
- **Review key findings on the effectiveness, cost and benefit-cost of adolescent substance abuse treatment**

The Prevalence and Course of Use

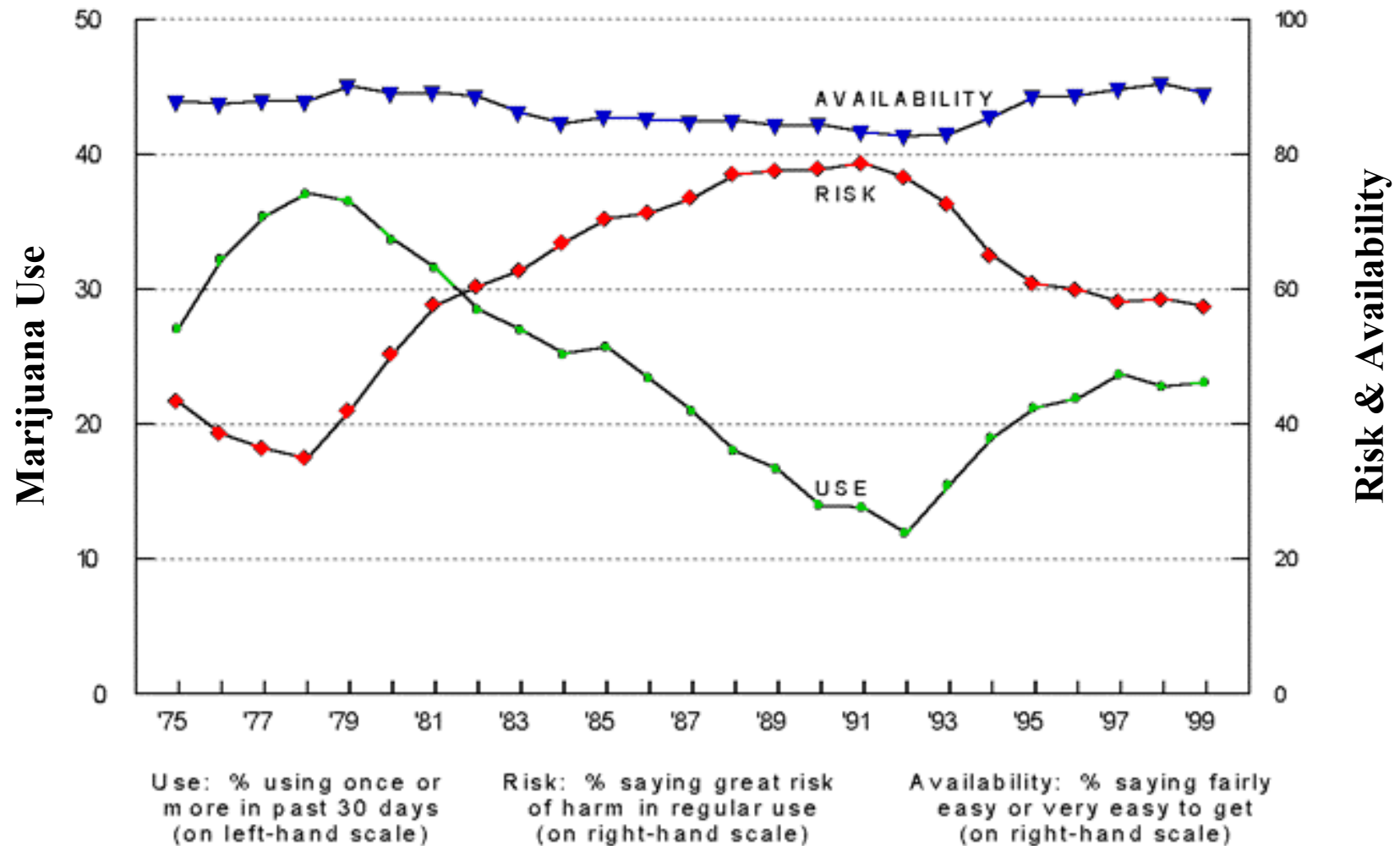
- While the public has generally focused on a leveling off of the prevalence of “any” substance use, the rates of daily use among 12th graders in 2000 were still substantially higher than in 1992 for
 - being drunk on alcohol (1.7% vs. 0.8%)
 - smoking tobacco (20.2% vs. 17.2%)
 - using marijuana (6.0% vs. 1.9%)

Primary Onset of Substance Use Occurs Between Ages 12 and 20

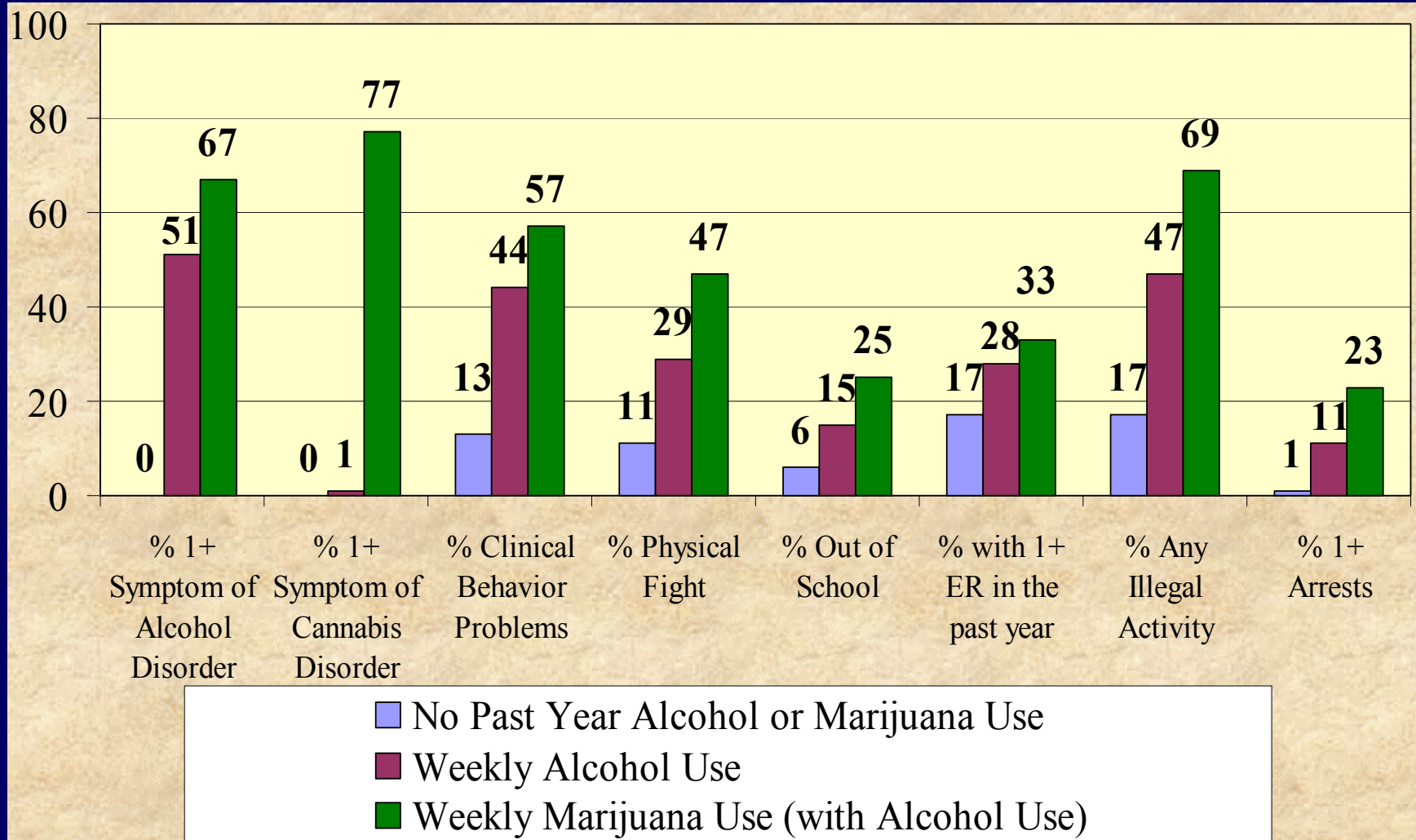


Source: Anthony, J.C., & Arria, A.M. (1999). Epidemiology of substance abuse in adulthood. In P.J. Ott, R.E. Tarter, & R.T. Amerman (Eds). Sourcebook on substance abuse. Etiology, epidemiology, assessment and treatment. Boston, MA: Allyn and Bacon.

Importance of Perceived Risk



Consequences of Substance Use



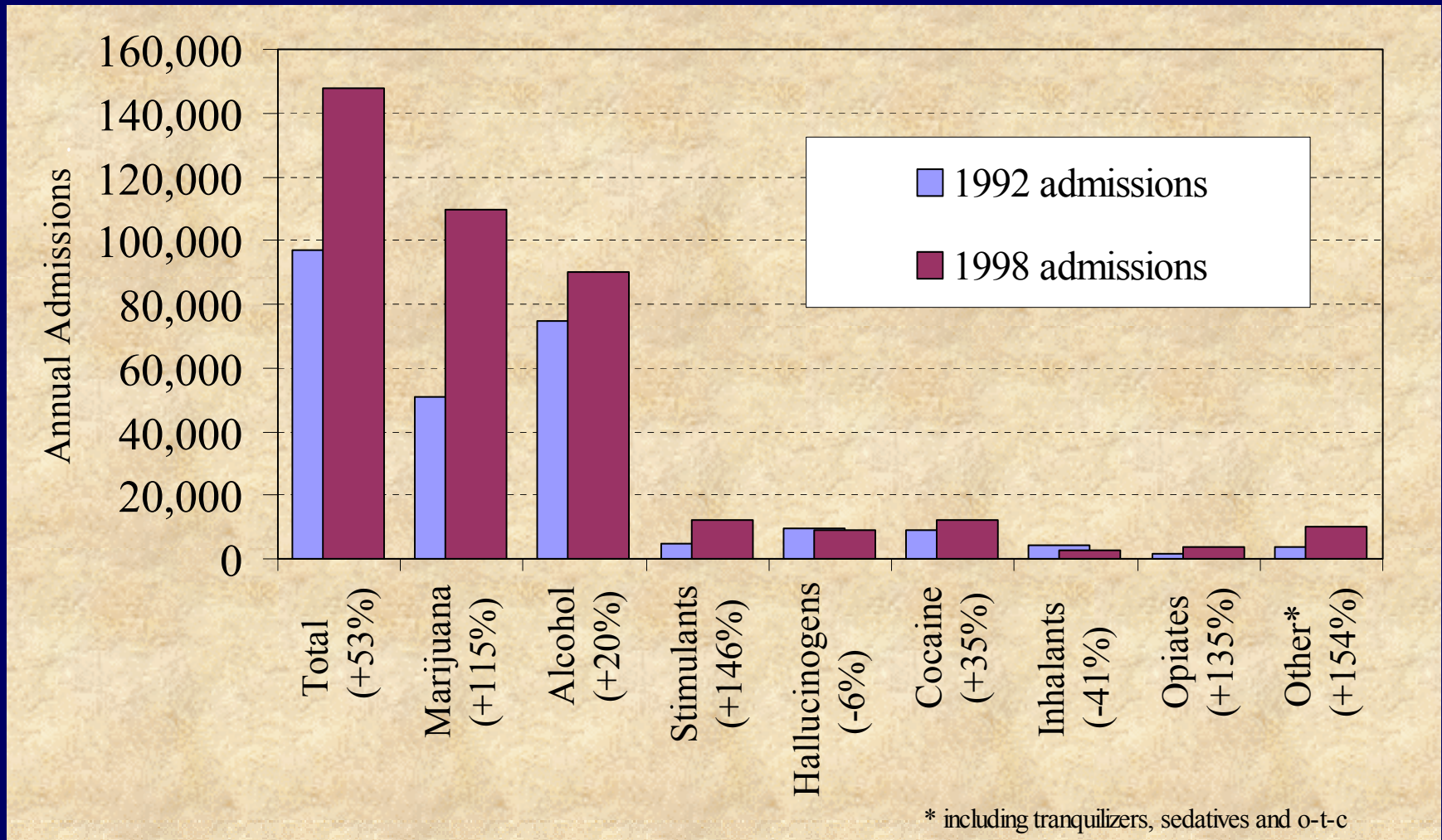
Source: Dennis, M.L., Godley, S.H., & Titus, J.C. (1999, Fall).

The Adolescent Treatment System



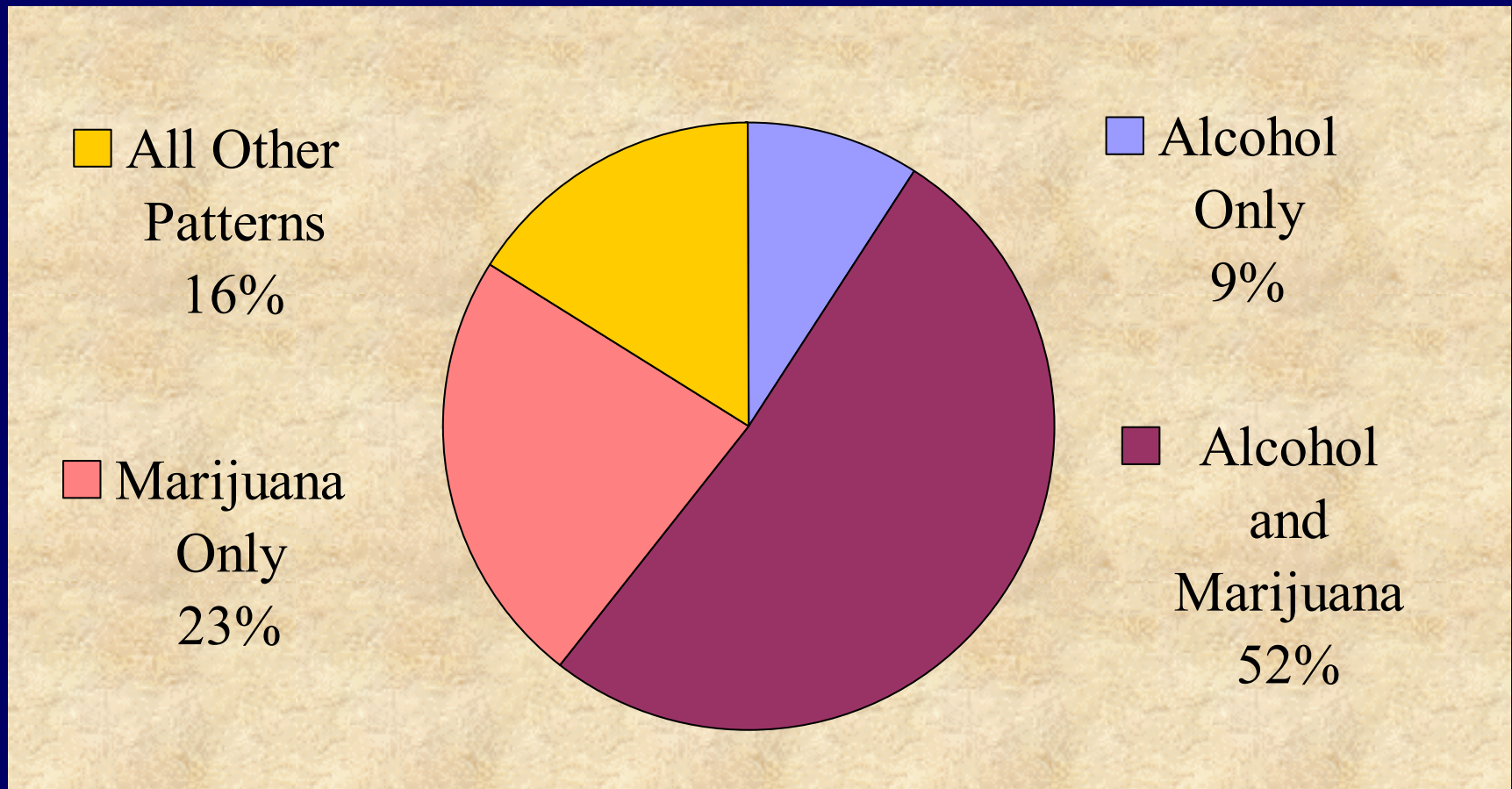
- **Less than 1/10th of adolescents with substance dependence problems receive treatment**
- **Under 50% stay 6 weeks, 75% stay less than the 3 months recommended by NIDA**
- **From 1992 to 1998, admissions to treatment increased 53% (96,787 to 147,899)**
- **From 1992 to 1998, admissions for treatment of primary, secondary or tertiary marijuana use disorders increased 115% (51,081 to 109,875)**
- **Though it varies by state, funding for adolescent treatment is generally about 40% Medicaid, 20% state/block grant, and 30% a mixture of self/private insurance.**

Adolescent Admissions (1992-1998)



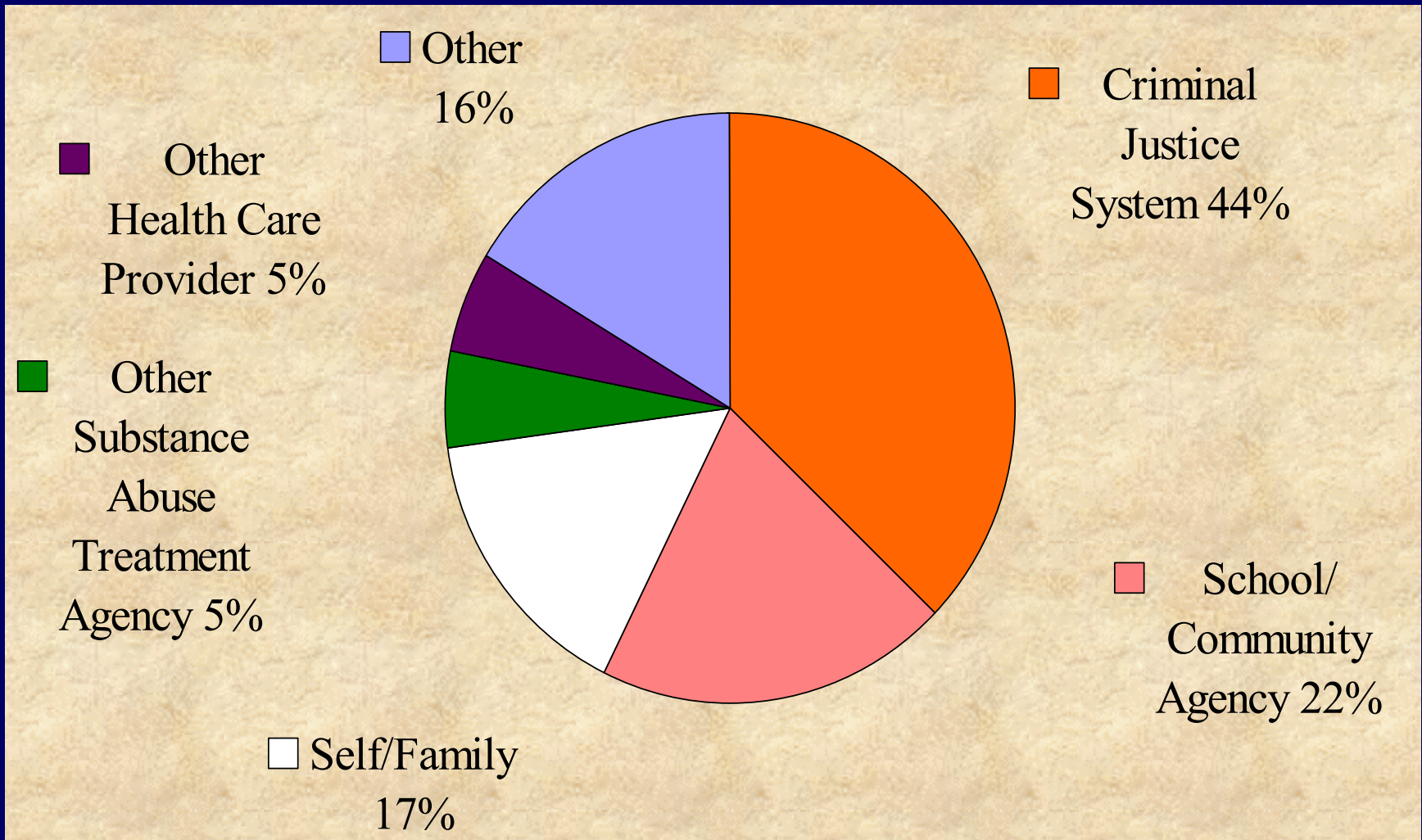
Source: Dennis, et al., in press and OAS (2000) 1998 Treatment Episode Data Set (TEDS)

Patterns of Substance Use Problems



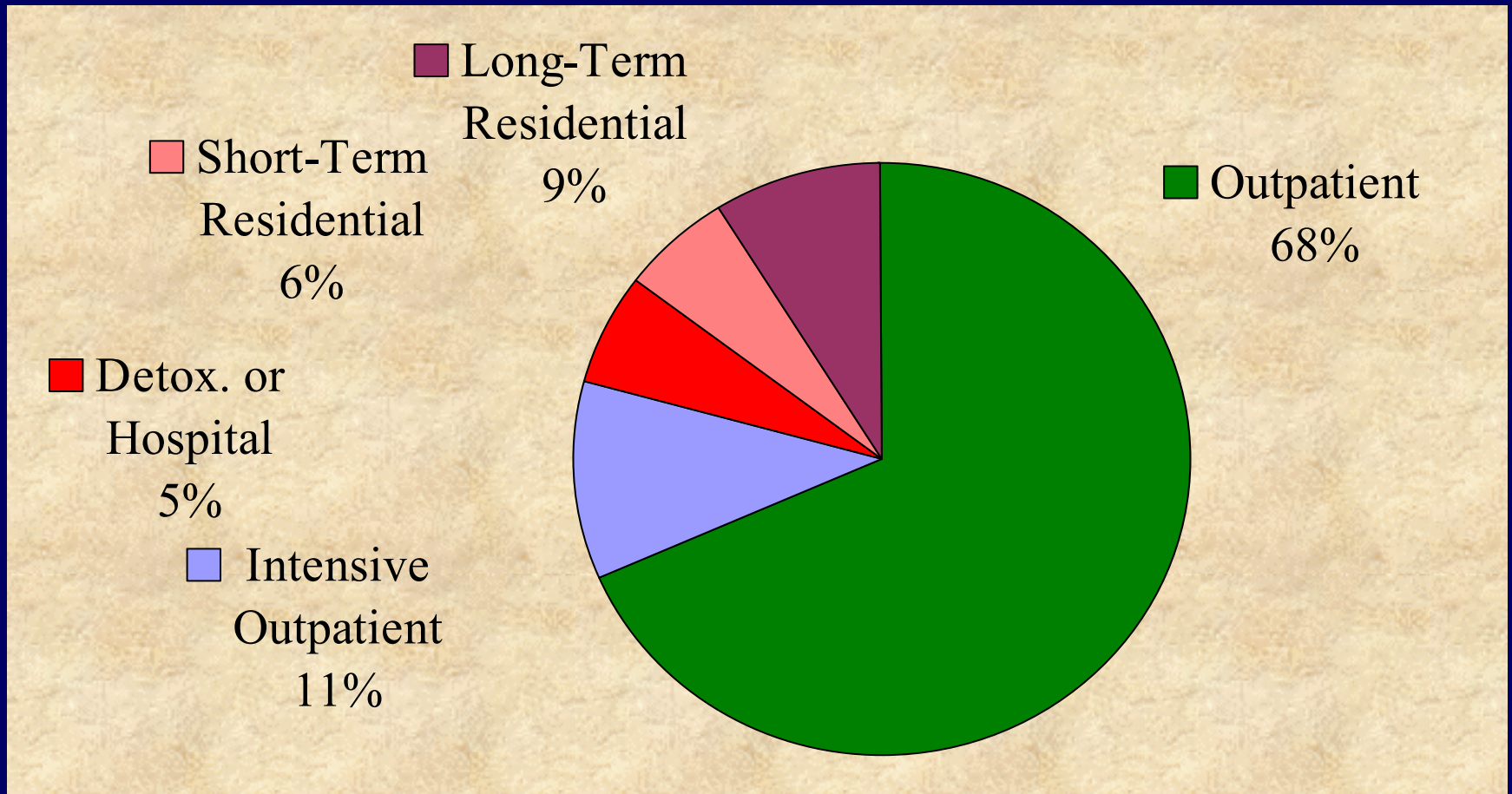
Source: Dennis et al., in press and OAS (2000) 1998 Treatment Episode Data Set (TEDS)

Sources of Adolescent Referrals



Source: Dennis et al., in press and OAS (2000) 1998 Treatment Episode Data Set (TEDS)

Level of Care at Admission



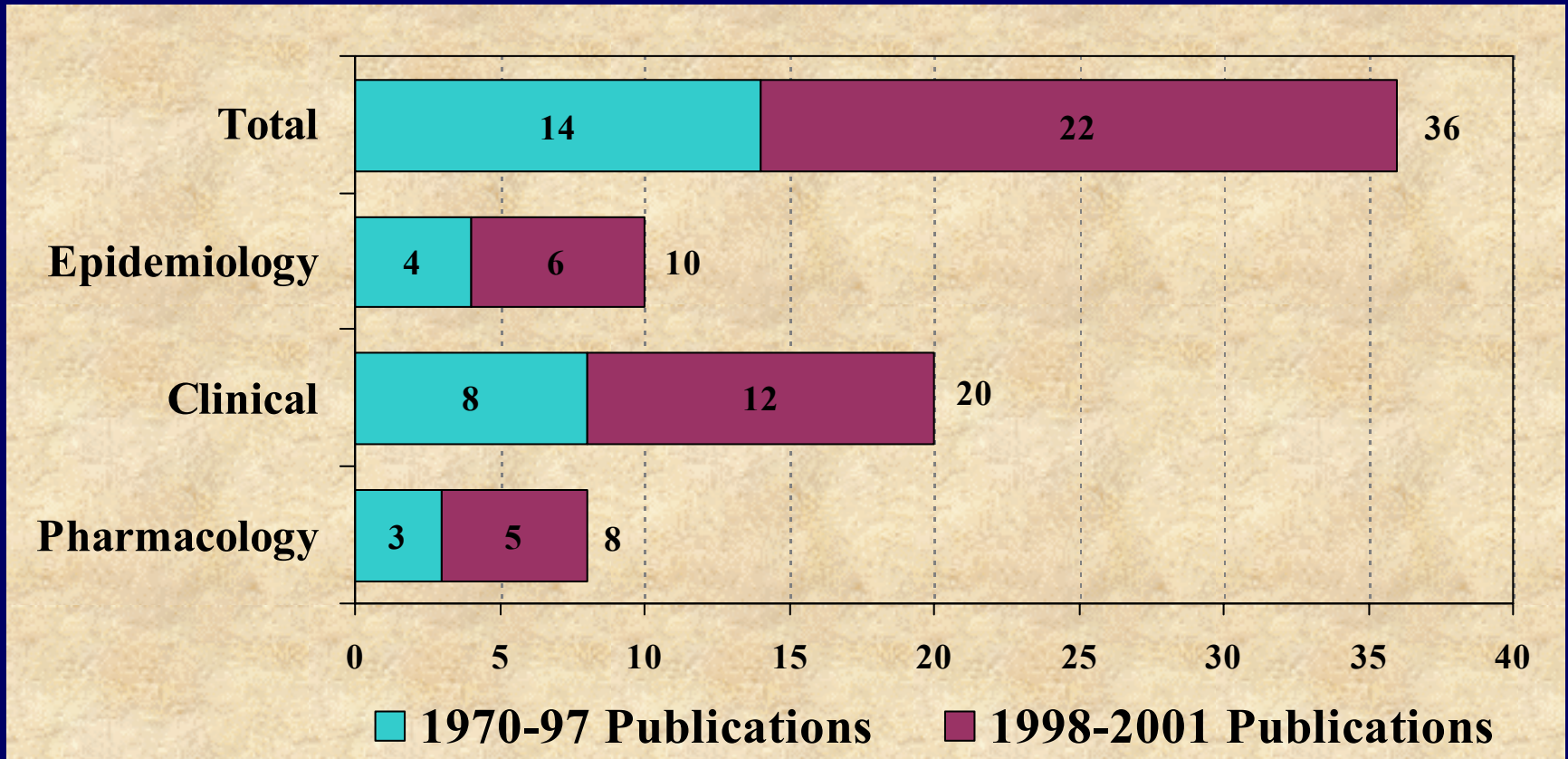
Source: Dennis et al, in press and OAS (2000) 1998 Treatment Episode Data Set (TEDS)

Knowledge Base from 36 Studies

- **7 large multi-site longitudinal studies (DARP, TOPS, SROS, TCA, NTIES, DATOS-A, DOMS), including 1 large multi-site experiment (Cannabis Youth Treatment - CYT)**
- **21 behavioral treatment studies (12-step, behavioral, family, inpatient, therapeutic communities, engagement, aftercare), including CYT and 1 pharmacology-behavioral (CBT) trial**
- **8 pharmacology treatment studies (bupropion, disulfiram, fluoxetine, lithium, pemoline, sertraline) and 1 pharmacology-behavioral (CBT) trial**
- **2 economic studies of adolescent substance abuse treatment costs and benefit-costs (CYT, ATM)**

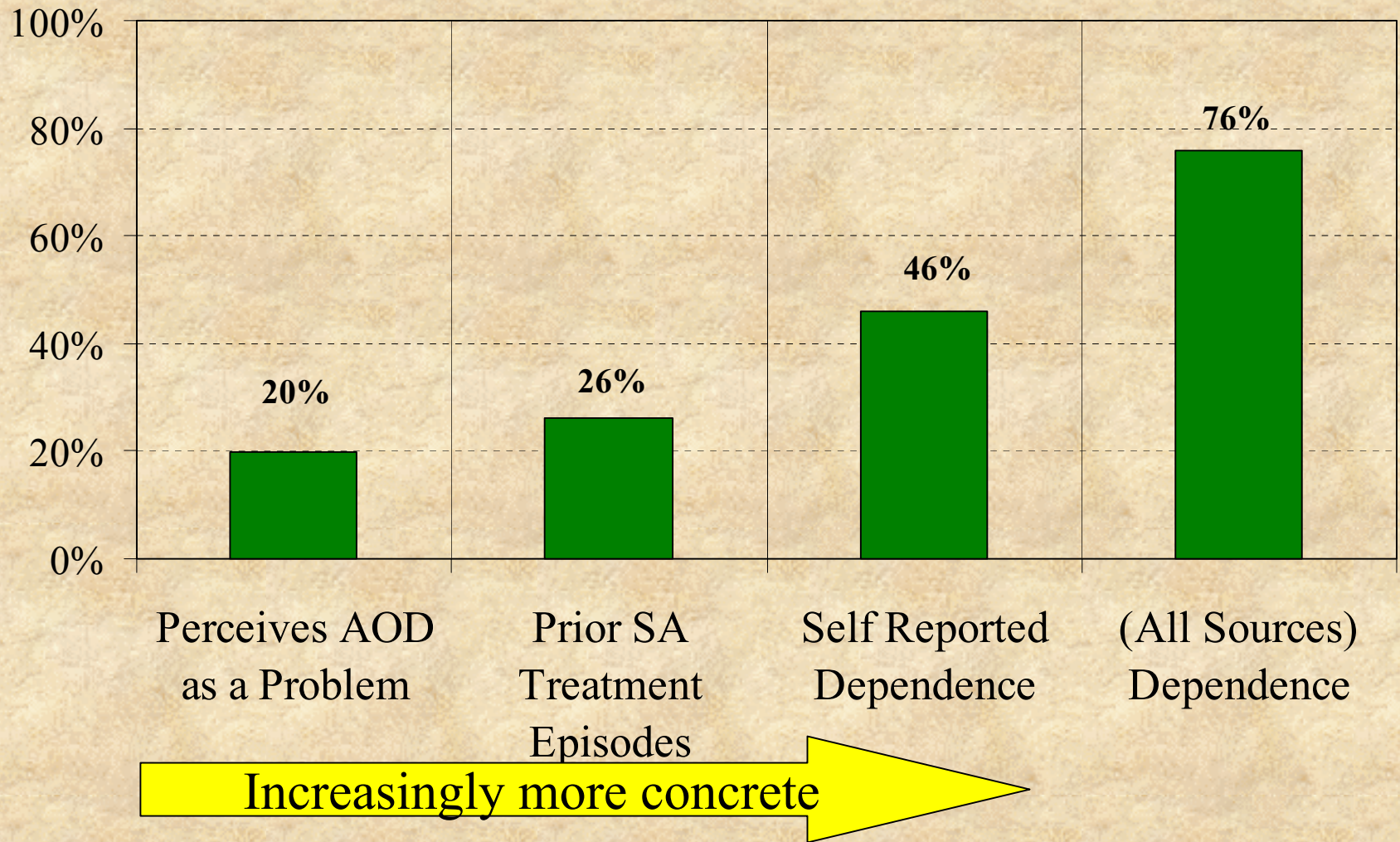
Source: See Summary Tables Provided

Studies by Date of First Publication



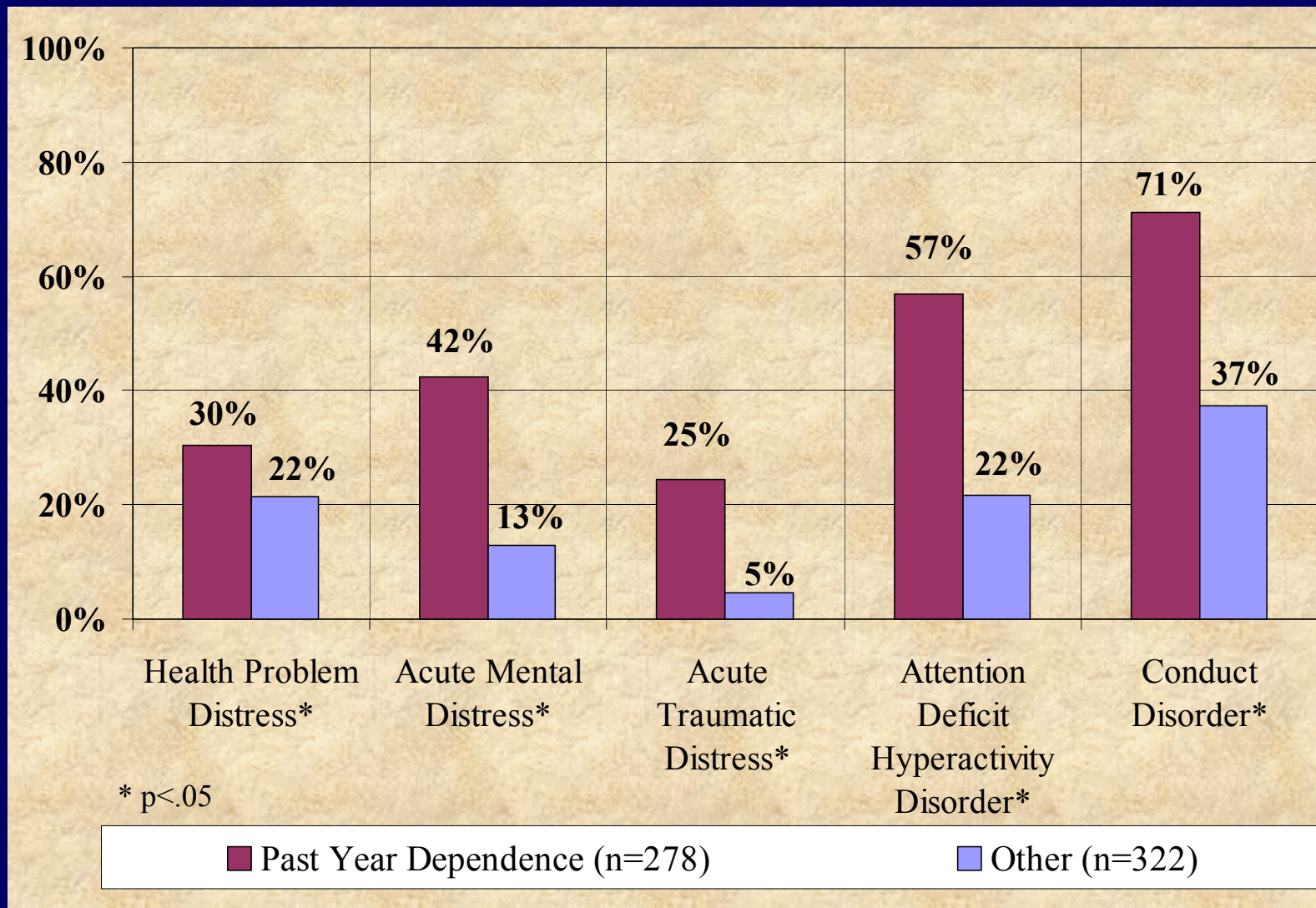
With over 60% of the studies first published in the past 3 years and over 3 dozen more currently in the field, we are entering a “renaissance of knowledge” in this area.

Impact of Definition and Sources



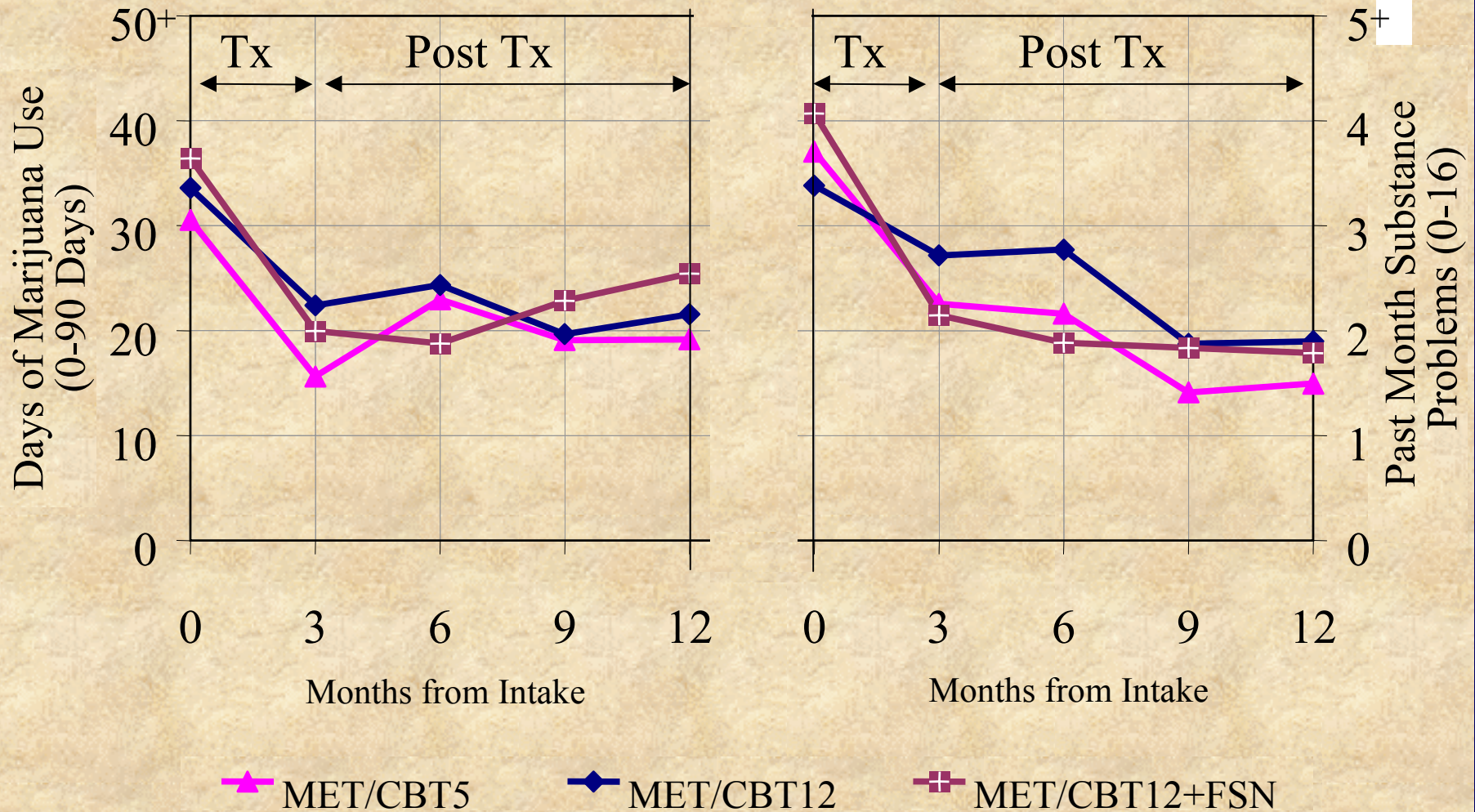
Source: Cannabis Youth Treatment (CYT) study

Severity is Related to Other Problems



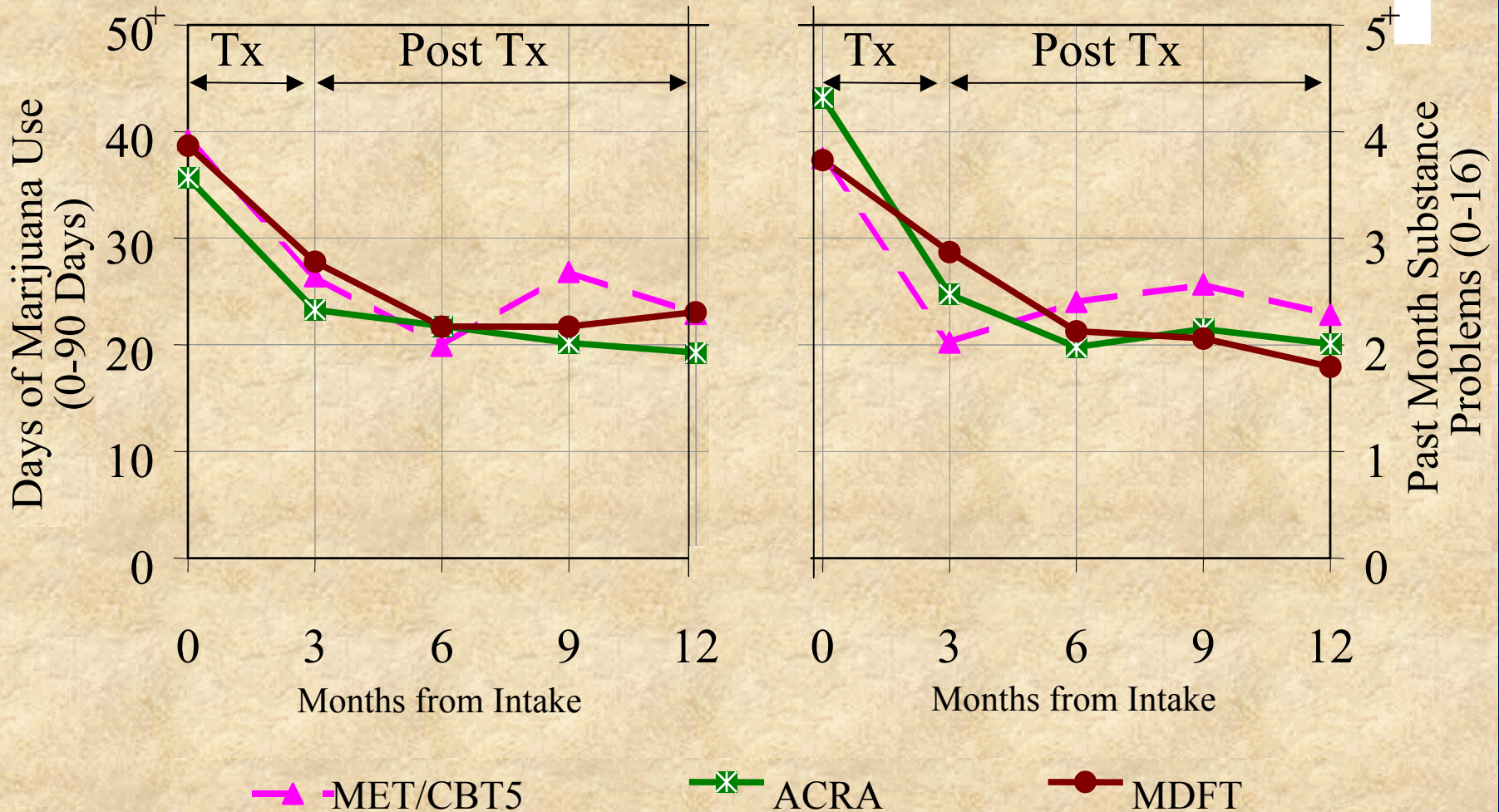
Source: Cannabis Youth Treatment (CYT) study

CYT Incremental Arm Outcomes: Does Dosage Matter?

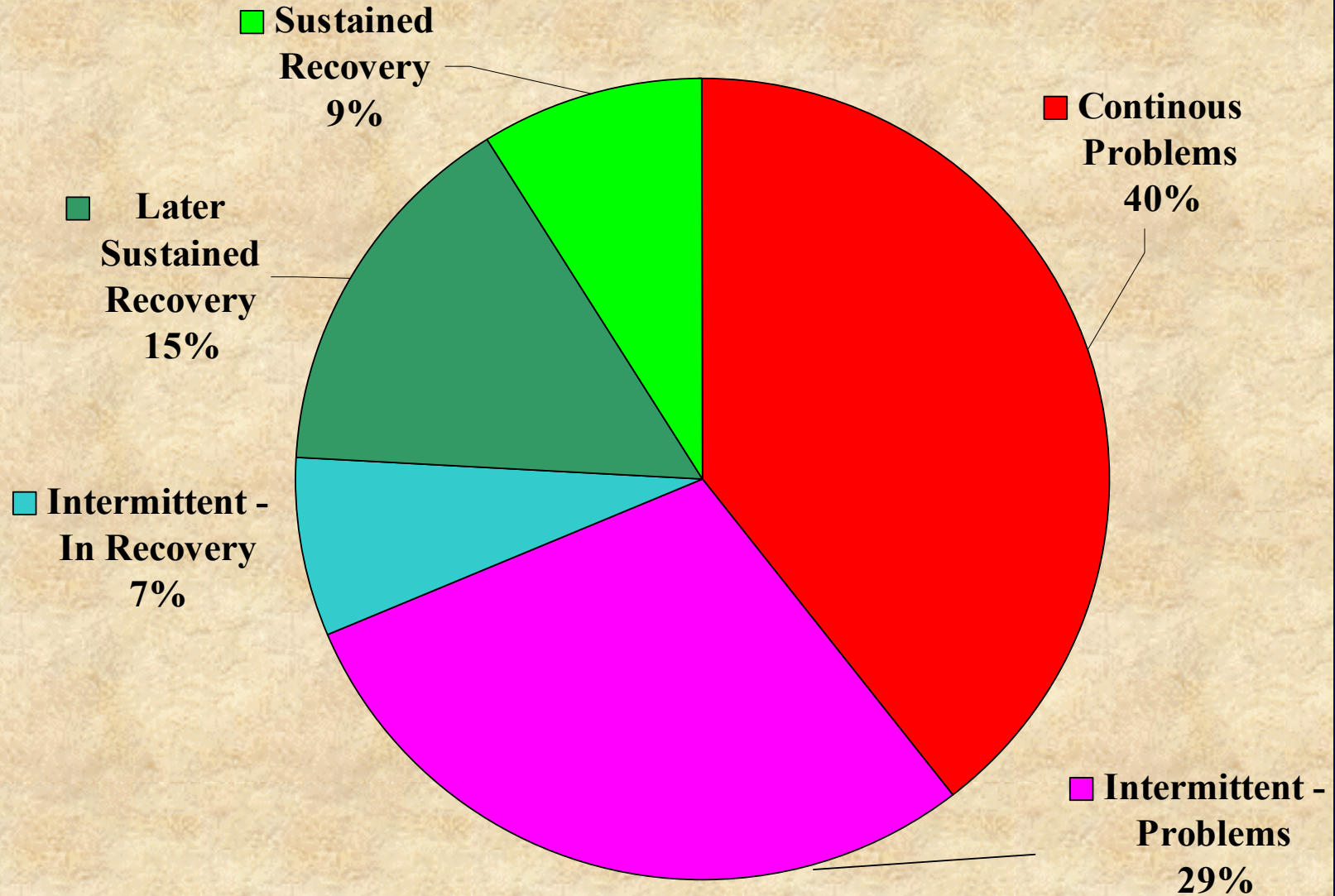


Source: Cannabis Youth Treatment (CYT) study

CYT Alternative Arm Outcomes: Does Treatment Type Matter?



Recovery Pattern Over 12 Months



Source: Cannabis Youth Treatment (CYT) study

Key Lessons



- **Improvements generally came during active treatment and were sustained for 12 or more months**
- **Family therapies were associated with less initial change but more change post active treatment (and the same in long-term effects)**
- **Effectiveness was associated with therapies that:**
 - **were manual-guided and had developmentally appropriate materials**
 - **involved more “clinically” focused supervision and quality assurance**
 - **achieved therapeutic alliance and early positive outcomes**
 - **successfully engaged adolescents in aftercare, support groups, positive peer reference groups, more supportive recovery environments**

Key Lessons - Continued

- **Interventions that are associated with no or minimal change in substance use or symptoms:**
 - **Passive referrals**
 - **Educational units alone**
 - **Probation services as usual**
 - **Unstandardized outpatient services as usual**
- **Interventions associated with deterioration:**
 - **treatment of adolescents in “groups including one or more highly deviant individuals” (but NOT all groups)**
 - **treatment of adolescents in adult units and/or with adult models/materials (particularly outpatient)**

Source: See Summary Tables Provided

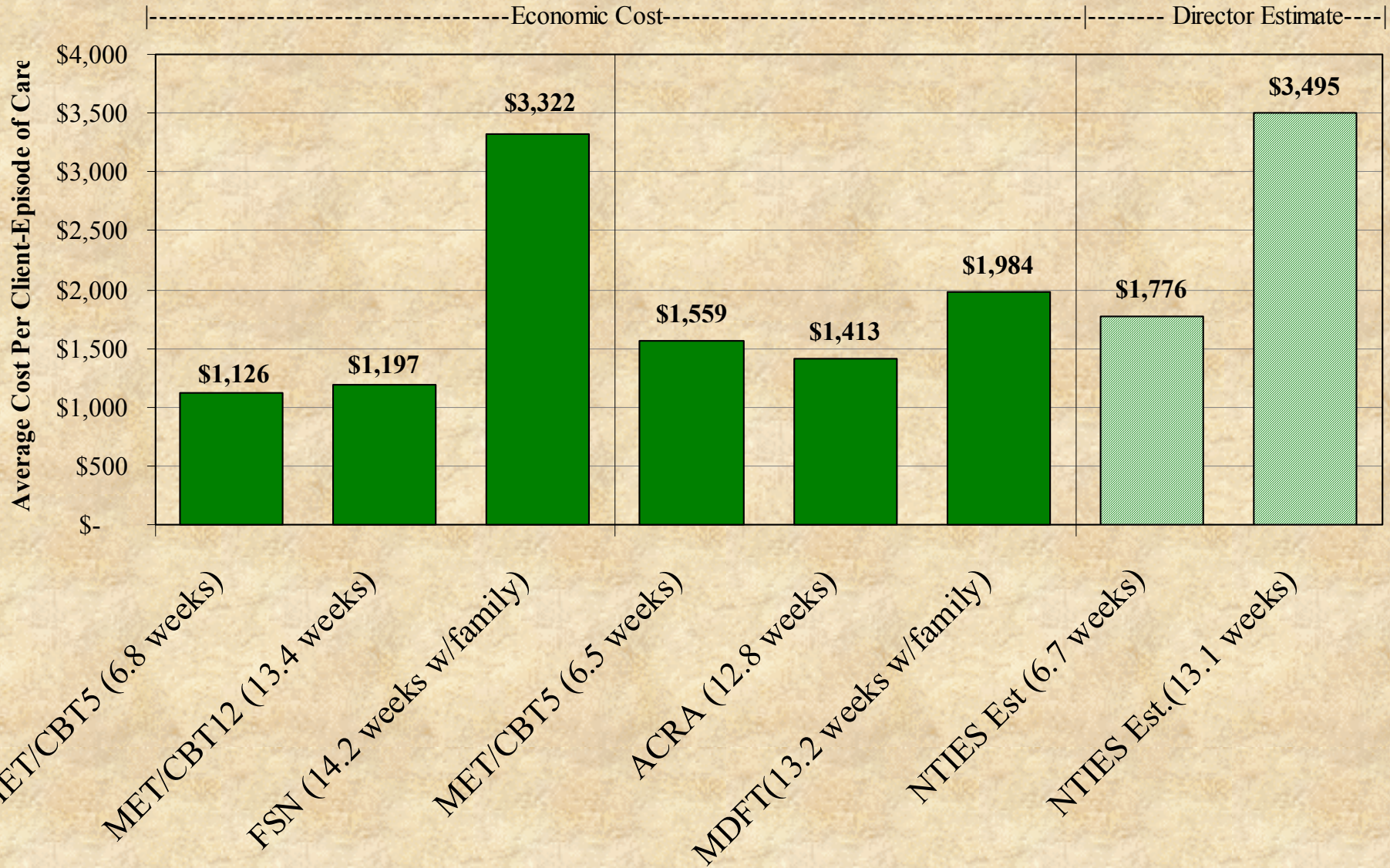
Economic Studies



- **One attempt to have directors estimate cost of substance abuse treatment and enhancements (NTIES)**
- **Two major studies of the cost of different types of adolescent outpatient treatment (CYT) and residential treatment (ATM – underway now)**
- **One study estimating the benefits/changes in cost to society associated with adolescent substance abuse treatment (CYT)**

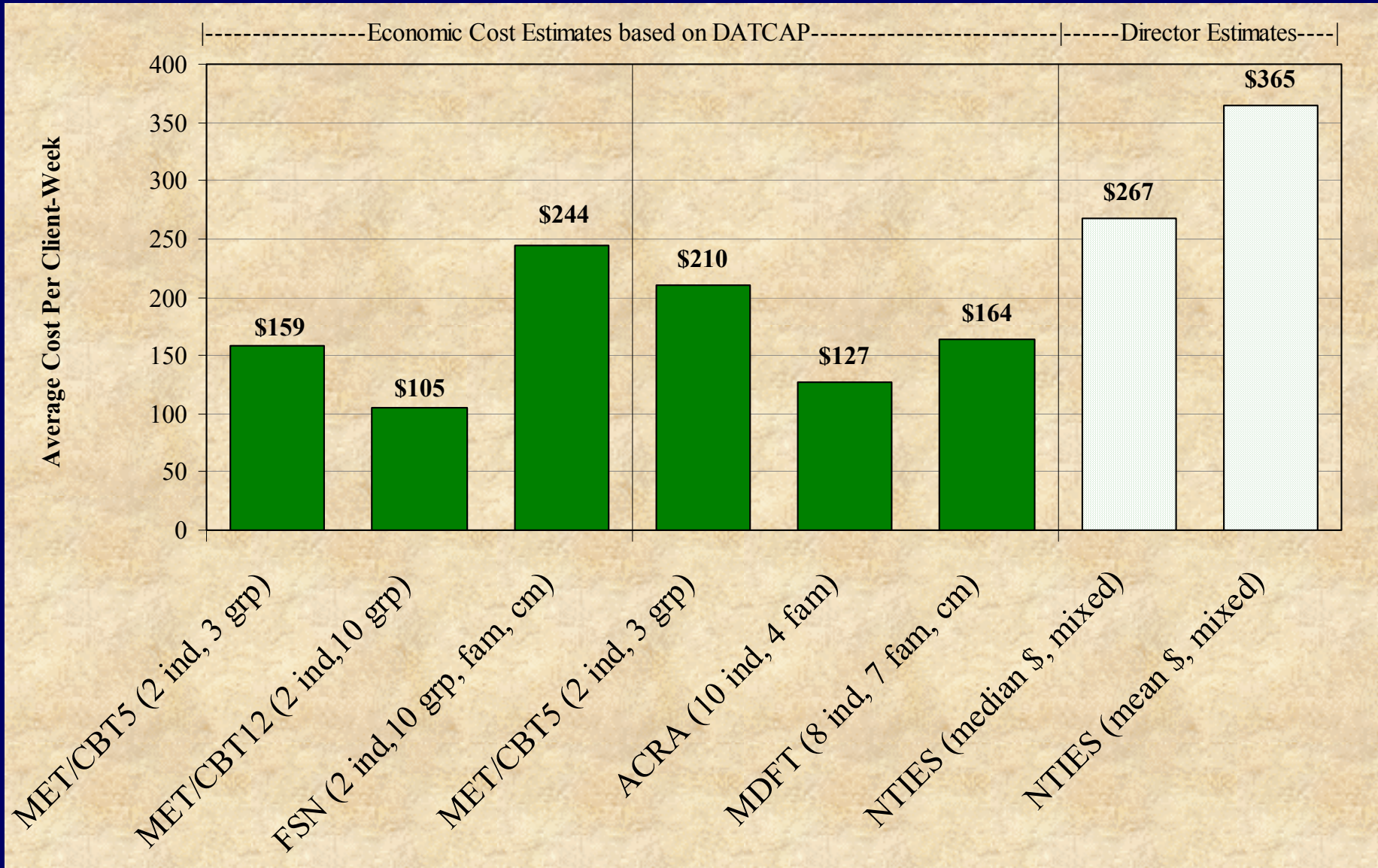
Source: Summary Tables Provided and Bukstein & Kithas, in press

Average Episode Cost of Treatment



Source: Cannabis Youth Treatment (CYT) study

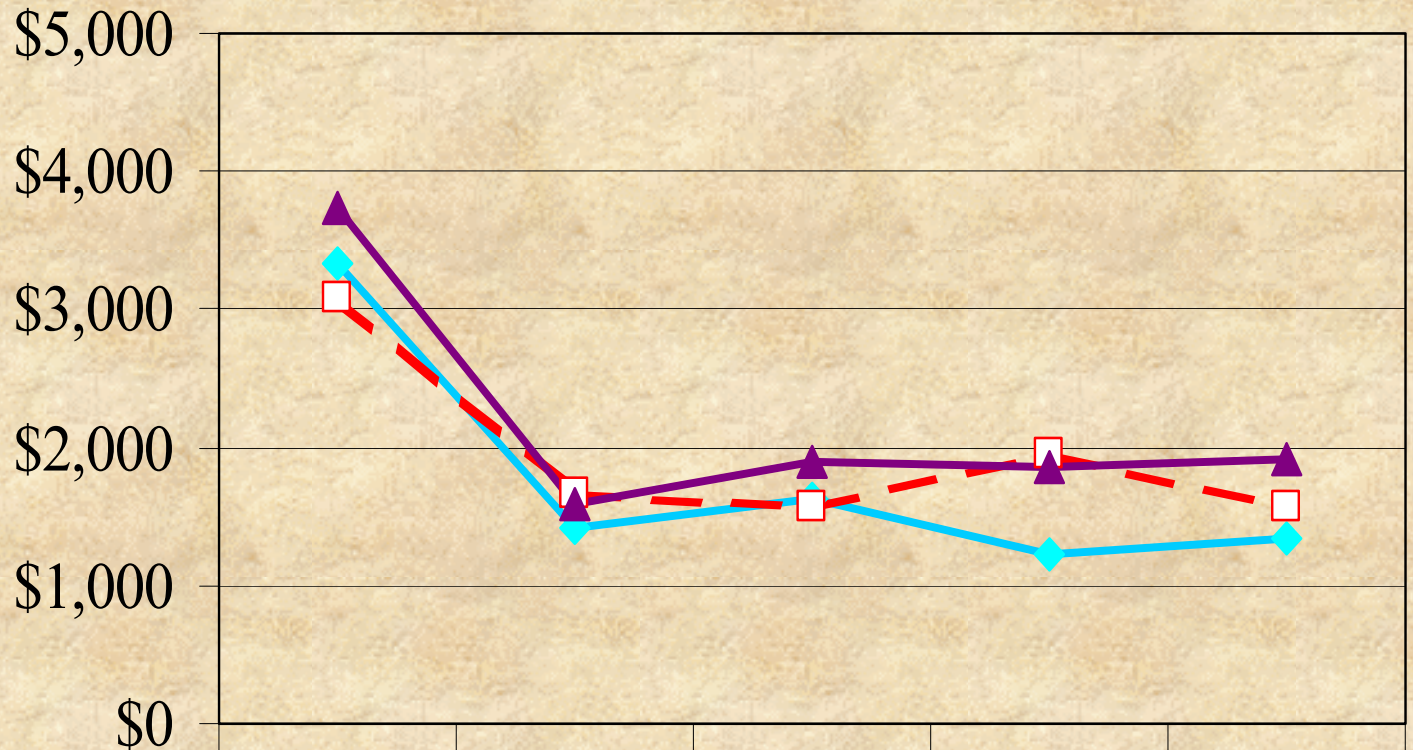
Average Weekly Cost of Treatment



Source: Cannabis Youth Treatment (CYT) study

Average Cost of Drug Abuse Consequences over Time by Condition: CYT Incremental Arm

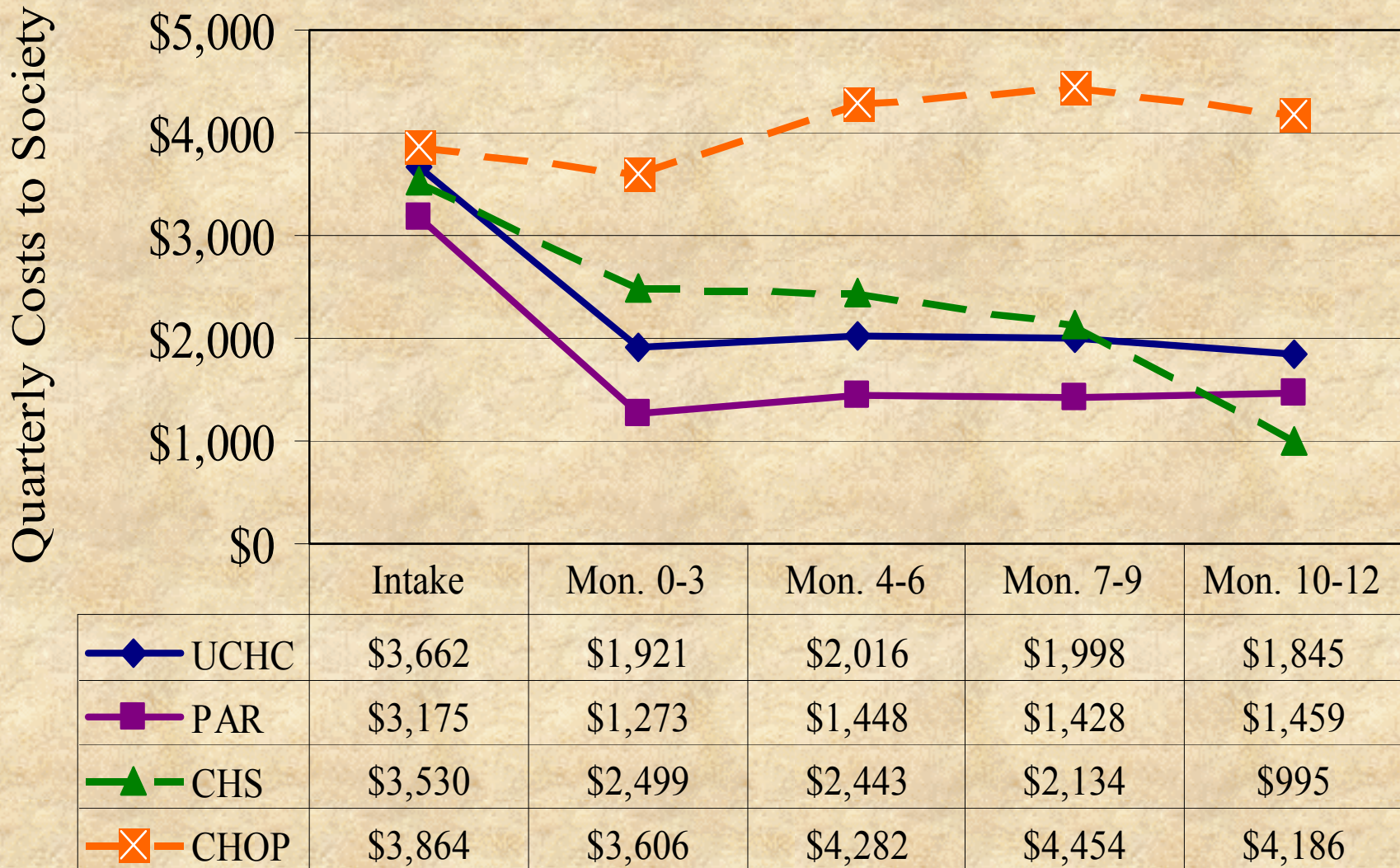
Quarterly Cost to Society



	Intake	Mon. 0-3	Mon. 4-6	Mon. 7-9	Mon. 10-12
MET/CBT5; p<0.01	\$3,332	\$1,418	\$1,624	\$1,228	\$1,348
MET/CBT12; p<0.01	\$3,084	\$1,659	\$1,574	\$1,950	\$1,578
FSN; p<0.01	\$3,742	\$1,587	\$1,889	\$1,857	\$1,919

Source: Cannabis Youth Treatment (CYT) study

Average Cost of Drug Abuse Consequences over Time by CYT Site



Source: Cannabis Youth Treatment (CYT) study

Performance Monitoring Efforts

- **Drug Outcome Monitoring Study (DOMS) to develop case mix adjustments across adults and adolescent levels of care**
- **CSAT's Treatment Outcome Performance Pilot Studies (TOPS I & II)**
- **National Committee on Quality Assurance (NCQA) developing common performance measures to be used for evaluating private plans**
- **Outcome Roundtable for Children and Families (working with mental health groups including MHSIP, NASMHPD)**
- **V8 group, a coalition of major business/insurance purchasers**
- **National Quality Forum, that includes consumer groups, unions, associations, insurers etc.**
- **Washington Circle Group (WCG) to develop common, simple, feasible, and valid performance measures that are as common across these groups as possible**

DRAFT WCG Nested Performance Measures (simple leading predictors of outcomes)

Identification

Everyone in Plan or Target Population

Percent Screened

Percent with Substance Diagnosis

Initiation

Percent Initiating Treatment

Engagement

Percent Engaged by
Treatment System

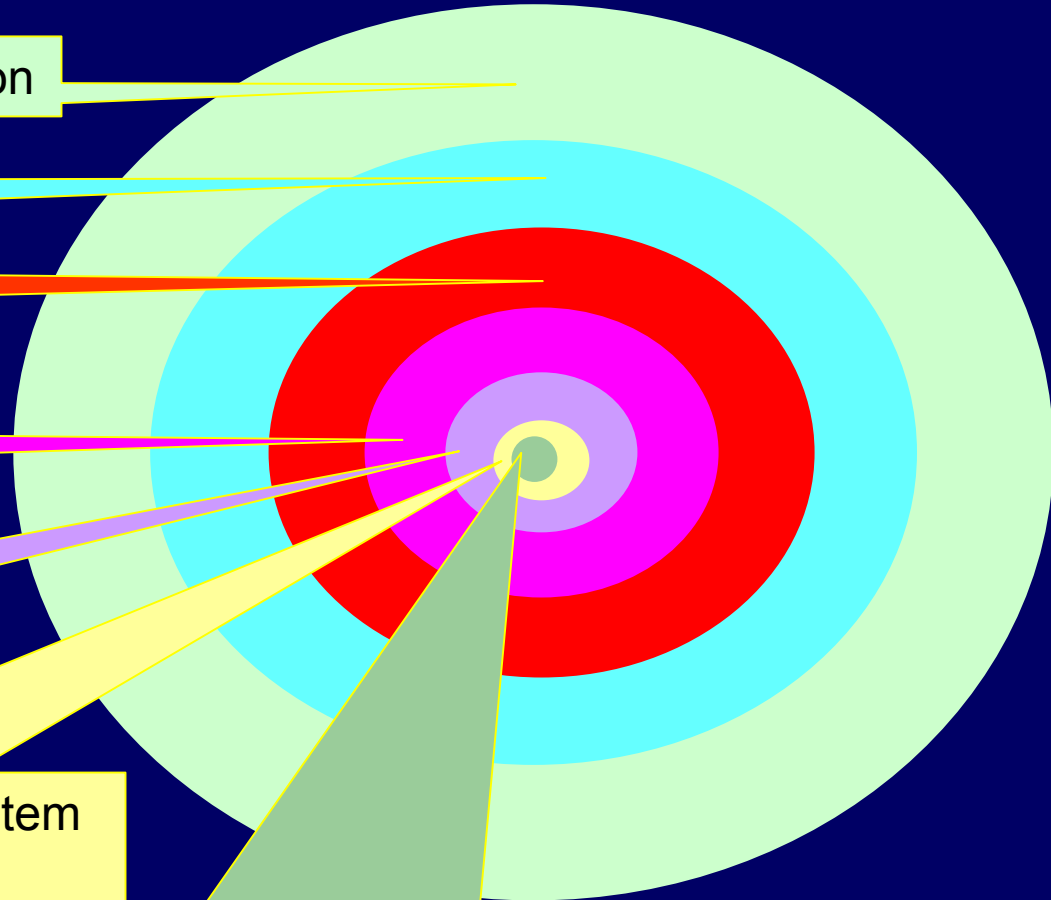
Retention

Percent Retained by Treatment System

- % with Psychiatry Services
- % with Family Services
- % stepped down from Residential/IOP

Maintenance

Percent Receiving Recovery Management Check-ups and Support



Reprise



- **We are entering a renaissance of knowledge about adolescent substance abuse treatment**
- **Treatment capacity is growing but we are only reaching 1 of 10 adolescents with substance use disorders**
- **Several interventions work, but 2/3 of the adolescents are still having problems 12 months later**
- **We need to move beyond focusing on minor variations in therapy (behavioral brand names) and acute episodes of care to emphasize continuing care and a recovery management paradigm**
- **There are major problems in the system, making performance measures more useful than simple outcomes**
- **It is very difficult to predict exactly who will relapse so it is essential to conduct recovery management/monitoring with all adolescents**

Contact Information



Michael L. Dennis, Ph.D., Senior Research Psychologist

Lighthouse Institute, Chestnut Health Systems

720 West Chestnut, Bloomington, IL 61701

Phone: (309) 827-6026, Fax: (309) 829-4661

E-Mail: Mdennis@Chestnut.Org

Mady Chalk, Ph.D., Director

Office of Quality Improvement and Financing

Center for Substance Abuse Treatment (CSAT)

5515 Security Lane, Rockwall II, Rockville, MD 20852

Phone: 301/443-8796; Fax: 301/480-3045

E-Mail: MChalk@samhsa.gov