Behavioral Health is Essential to Health

Prevention Works

Treatment is Effective

People Recover
Estimating Substance Abuse Treatment: A Comparison of Data from a Household Survey, a Facility Survey, and an Administrative Data Set

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SAMHSA Mission

Reduce the impact of substance abuse and mental illness on America's communities

• Treatment for substance abuse is a primary component

• Data on treatment need and services are essential
Key Treatment Data Needs

• How many people need, seek, and receive substance abuse treatment
• Barriers to receiving needed care
• What substances are people treated for
• Cost, payment sources, outcomes
• Differences by state, demographics
SAMHSA Data Sources

- **National Survey on Drug Use and Health (NSDUH):** Face-to-face household survey
- **National Survey of Substance Abuse Treatment Services (N-SSATS):** Census of treatment programs
- **Treatment Episode Data Set (TEDS):** Administrative data set of admissions and discharges
NSDUH Design

• Representative nationally and in each state
• Civilian, noninstitutional population, age 12+
• Face-to-face interview (1 hour) using ACASI
• Detailed sociodemographic, substance use and treatment data
• 68,000 respondents each year; oversample age 12-25
• 3,600 respondents in each of 8 large states; 900 in other states
N-SSATS Design

- Annual census of all known public and private substance abuse treatment facilities in the U.S. (about 14,000)

- Questionnaire filled out by facility: location, types of services, payment sources, number of clients served
  - Single day client census (by alcohol, drug, both)
  - Admissions in past 12 months

- Multi-mode: mail, telephone, web

- 93% response rate
TEDS Design

- Admissions, discharges in substance abuse treatment programs; limited to publicly funded in most states; linked admission-discharge records, unique patient number in some states

- Minimum data set: demographics, substances abused (up to 3), type of service, dates of admission and discharge, reason for discharge

- Data are collected by programs and reported to state agencies; state agencies send data files to SAMHSA

- Coverage varies by state
  - Some states do not report any data in some years
  - In reporting states, types of programs included can vary
Measures Assessed in this Study

- **Time periods**: NSDUH 2005-10; TEDS, N-SSATS 2007-9
- **Specialty treatment**: Treatment at a hospital, drug rehab facility, or mental health center
- **# People in treatment on a single day**
  - By state, type of facility, and drug vs. alcohol
- **# People receiving treatment in 12-month period**
  - By state, demographics, substance of abuse
- **# Admissions in 12-month period**
  - By state
Estimating Single Day Treatment Count

- **NSDUH (2 methods)**
  - Direct question: Enrolled in treatment on Oct. 1 of previous calendar year?
  - Currently in treatment on day of interview (“Average day”)
- **N-SSATS**
  - Direct questions answered by program
- **TEDS**
  - Based on dates in linked admission and discharge records, clients in treatment can be determined for each day; for states with no linked records, discharge date for each admission was imputed based on treatment modality, etc.
Estimating Number of Persons Receiving Treatment in 12 Months

- **NSDUH**
  - Module of questions on types of treatment in past 12 months

- **N-SSATS**
  - Not available

- **TEDS**
  - Based on dates in linked admission and discharges, and unique person identifiers; for states with no linked records or unique identifiers, a person was defined as having a unique combination of state, client ID, age, sex, and race/ethnicity; for admissions with no matching discharge, discharge date was imputed using modality and other variables.
Estimating Number of Admissions in 12 Months

- **NSDUH**
  - Not available
- **N-SSATS**
  - Direct question
- **TEDS**
  - Count of reported admission records
Other Caveats

• TEDS covered only 47 states
  – Minimal impact on national estimates (4%)
• Seasonality of treatment could impact single day count
  – Single day census nearly constant throughout year, based on TEDS
• Sampling error in NSDUH
  – Prevalence of past year treatment only 1%
  – Sample size 900 per year in most states
  – Focus on 8 large states; pool several years of data
RESULTS
National-Level Single-Day Treatment Counts for Alcohol or Drug Treatment: NSDUH, N-SSATS, and TEDS

NSDUH = National Survey on Drug Use and Health; N-SSATS = National Survey of Substance Abuse Treatment Services; TEDS = Treatment Episode Data Set.
Percentages of Single-Day Treatment Counts Attributable to Alcohol Only, Drug Only and Alcohol and Drug Treatment: NSDUH, N-SSATS, and TEDS

**NSDUH Average Day Single Day Count (N=1,196,460)**
- Alcohol Only: 33.2%
- Drugs Only: 36.7%
- Alcohol and Drugs: 26.3%

**N-SSATS Single Day Treatment Count (N=1,153,617)**
- Alcohol Only: 45.2%
- Drugs Only: 36.0%
- Alcohol and Drugs: 18.8%

**TEDS Single Day Treatment Count (N = 532,109)**
- Alcohol Only: 37.4%
- Drugs Only: 40.9%
- Alcohol and Drugs: 19.2%
Single-Day Treatment Counts for Alcohol or Drug Treatment for the Eight Largest States: NSDUH, N-SSATS, and TEDS

NSDUH = National Survey on Drug Use and Health; N-SSATS = National Survey of Substance Abuse Treatment Services; TEDS = Treatment Episode Data Set.
Single Day Treatment Counts for Hospital Inpatient Modality: N-SSATS, and TEDS

N-SSATS (2007-2009 average) = 14,207
TEDS (2007-2009 average) = 1,941

N-SSATS = National Survey of Substance Abuse Treatment Services; TEDS = Treatment Episode Data Set.
Numbers of Persons Receiving Specialty Substance Use Treatment in the Past Year: NSDUH and TEDS

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Numbers of Persons Receiving Alcohol or Drug Treatment in the Past Year for the Eight Largest States: NSDUH and TEDS

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment for Specific Substances from Specialty Treatment Programs: NSDUH and TEDS

- **Alcohol**: NSDUH 68.8%, TEDS 59.5%
- **Hallucinogens**: NSDUH 0.6%, TEDS 11.0%
- **Inhalants**: NSDUH 0.2%, TEDS 6.1%
- **Prescription Drugs**: NSDUH 26.7%, TEDS 23.6%
- **Heroin**: NSDUH 13.8%, TEDS 15.2%
- **Cocaine (Including Crack)**: NSDUH 25.8%, TEDS 25.3%
- **Marijuana**: NSDUH 31.0%, TEDS 39.7%

**Note**: Methamphetamine included in “Prescription Drugs” for both NSDUH and TEDS.

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment from Specialty Treatment Programs in the Past Year, by Modality: NSDUH and TEDS

- **Hospital Inpatient**: NSDUH (N = 2,464,150) - 31.4%, TEDS (N = 1,928,578) - 3.2%
- **Residential Rehabilitation - Inpatient**: NSDUH - 40.8%, TEDS - 28.2%
- **Outpatient**: NSDUH - 81.1%, TEDS - 78.2%

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment from Specialty Treatment Programs in the Past Year, by Age Group: NSDUH and TEDS

NSDUH (N = 2,464,150)  TEDS (N = 1,928,578)

Aged 12 to 17: 6.4% (NSDUH), 8.8% (TEDS)
Aged 18 to 24: 18.8% (NSDUH), 19.3% (TEDS)
Aged 25 to 34: 23.4% (NSDUH), 26.2% (TEDS)
Aged 35 to 44: 22.6% (NSDUH), 23.2% (TEDS)
Aged 45 or Older: 28.9% (NSDUH), 22.5% (TEDS)

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment from Specialty Treatment Programs in the Past Year, by Race/Ethnicity: NSDUH and TEDS

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>NSDUH (N = 2,464,150)</th>
<th>TEDS (N = 1,928,578)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>66.4%</td>
<td>60.4%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>17.2%</td>
<td>19.6%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1.0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>1.7%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>12.6%</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment from Specialty Treatment Programs in the Past Year, by Years of Education: NSDUH and TEDS

NSDUH (N = 2,464,150)
- More than 12: 34.0%
- 12 (High School/GED): 33.1%
- 9 to 11 years: 27.2%
- 0 to 8 years: 5.6%

TEDS (N = 1,928,578)
- More than 12: 22.1%
- 12 (High School/GED): 39.8%
- 9 to 11 years: 28.6%
- 0 to 8 years: 9.5%

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Percentages of Persons That Received Treatment from Specialty Treatment Programs in the Past Year, by Employment Status: NSDUH and TEDS

* The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

NSDUH = National Survey on Drug Use and Health; TEDS = Treatment Episode Data Set.
Annual Admissions to Specialty Substance Use Treatment in the Past Year: N-SSATS and TEDS

N-SSATS = National Survey of Substance Abuse Treatment Services; TEDS = Treatment Episode Data Set.
Annual Admissions to Specialty Substance Use Treatment in the Past Year for the Eight Largest States: N-SSATS and TEDS

N-SSATS = National Survey of Substance Abuse Treatment Services; TEDS = Treatment Episode Data Set.
Conclusions

- TEDS appears to undercount treatment
  - N-SSATS: TEDS shows 46% of single day count and 56% of admissions
  - NSDUH: TEDS shows 37-44% of single day counts and 78% of persons treated
  - Varies by state
  - Undercount of inpatients and high SES clients
- NSDUH and N-SSATS estimates are similar, but NSDUH shows higher proportion of alcohol
- Further study needed to merge data sets and develop adjusted estimates