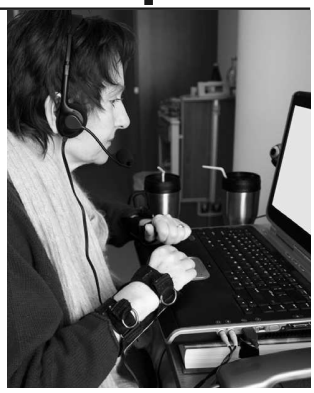
Data

Chapter 7



Policy makers need good data to make informed policy choices. This is particularly important in the context of substance abuse services. Approximately 8.5% of the state's population has substance abuse problems, but less than 10% of those in need of services are receiving them through the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMHDDSAS) community service system.[1] At least another 10% of those in need receive treatment services through programs that are not included in the DMHDDSAS data systems.[2] Despite the large percentage of the population that needs services, state and local agencies were unable to spend all the money the North Carolina General Assembly appropriated for substance abuse services. Data are needed to profile sections of the population most at risk for substance use and abuse and to identify the populations in need of substance abuse services; the type of services used both within DMHDDSAS and through other public and private providers of care; the availability and accessibility of services and recovery supports; service use, intensity, and completion rates; and recidivism rates. Ideally, data would be available at both the state and the local level. Further, programs and services should be evaluated to determine that the funding is well spent and programs are achieving positive outcomes.

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Data about the need and use of substance abuse services are collected by many different agencies. Yet there is not a state agency charged with collecting and synthesizing the data across agencies to gain a complete picture of the substance abuse problems in our state. (As described in more detail below, the Center for Child and Family Policy at Duke University is attempting to synthesize substance abuse data for adolescents for each county. However, this same integrated data source is not available for adults). In addition, while many data sources exist, there are still information gaps in the data the state does collect. This chapter describes data available to assess the scope of the substance abuse problem, information on prevention and treatment being provided by DMHDDSAS, and data needed to help improve substance abuse surveillance and services.

Available Data on The Scope of the Substance Abuse Problem

There are a number of data sources available to help monitor tobacco, alcohol, and drug use in North Carolina. Most of the data come from population-based surveys, which capture information on the prevalence and use of different types of substances, frequency of use, and perceptions of risk. The surveys are targeted to different populations (i.e. adults and youth). Most provide reliable estimates at the state level but stop short of generating valid estimates at either the regional or county levels. The survey data include:

- ***Behavioral Risk Factor Surveillance Survey (BRFSS)*** is a telephone survey sponsored by the Centers for Disease Control and Prevention and managed locally by the NC Center for Health Statistics.[a] The BRFSS measures the medical and behavioral health needs of the adult population by state, including tobacco and alcohol use, tobacco cessation efforts, and tobacco prevention. BRFSS data are available for the state as well as at the regional level and at the county level for the 22 largest counties.
- ***Child Health Assessment Monitoring Program (CHAMP)*** is a call-back survey of the BRFSS, where questions on a child's health are asked of the parent or other caregiver.[b] CHAMP is administered by the NC Center for Health Statistics. CHAMP asks parents about tobacco prevention and their child's tobacco use. CHAMP data are available at the state level only
- ***Youth Risk Behavior Survey (YRBS)*** is a self-administered school-based survey sponsored by the Department of Public Instruction.[c] The YRBS monitors selected risk behaviors among middle and high school students, including detailed questions about tobacco, alcohol, and drug use (including questions about individual illicit drugs) and tobacco cessation efforts. School participation is voluntary in North Carolina. YRBS data are available at the state and regional level from the Department of Public Instruction.
- ***National Survey of Drug Use and Health (NSDUH)***, formerly the National Household Survey of Drug Use, is a national survey of states' populations sponsored by the Substance Abuse and Mental Health Services Administration.[d] The NSDUH surveys people aged 12 and older. Results are available for the whole population, youth, young adults, and older adults and include information on tobacco, alcohol, and drug use; abuse and dependency; and perceptions of risk. Data are available at the state level.

In addition to survey data, there are a number of other sources of information on the scope of the substance abuse problem in North Carolina, including information from the NC Disease Event Tracking and Epidemiological Collection Tool, State Center for Health Statistics, Social Services, Department of Public Instruction, Higher Education Institutions, Law Enforcement Agencies and regulatory data, Highway Safety Research Center, and Department of Corrections, Division of Alcoholism and Chemical Dependency Programs.

a Information from the Behavioral Risk Factor Surveillance Survey can be found at: http://www.schs.state.nc.us/SCHS/data/brfss.cfm.
b CHAMPS information can be obtained at: http://www.schs.state.nc.us/SCHS/champ/index.html.
c Youth Risk Behavior Survey data are available at: http://www.nchealthyschools.org/data/yrbs/. Charlotte-Mecklenburg data is available from the Centers for Disease Control and Prevention at: http://www.cdc.gov/HealthyYouth/yrbs/index.htm.
d The National Survey on Drug Use and Health (NSDUH) data are available at: http://www.oas.samhsa.gov/nhsda.htm.

NC Disease Event Tracking and Epidemiological Collection Tool (NC-DETECT) is a collaboration between NC Division of Public Health and the North Carolina Hospital Association. It captures admissions data from community hospital emergency departments, including admissions related to substance or alcohol diagnoses. Data have been reported at the state and LME level quarterly by DHHS starting in SFY 2008. The most recent report found that 3% of all emergency room admissions are for substance abuse. This is likely an undercount of the number of people with a substance abuse diagnosis who are admitted to emergency rooms, because of stigma associated with the diagnoses, lack of capacity to diagnose substance abuse problems definitively, and lack of reimbursement for substance abuse services in comparison to other diagnoses.

State Center for Health Statistics data provide information on the number of deaths related to substance use.[f] Data are available at the state and county level. However, because alcohol and drug use are often underreported, these data may undercount the number of deaths in the state related to substance use.

Departments of Social Services provide data on whether alcohol or substance abuse was a contributing factor in child protective services investigations. Data are available for the state and all counties.[g] In SFY 2006, 5% of substantiated child maltreatment cases were due to substance abuse. DSS also collects information on the percentage of cases where substance abuse was a contributing factor in the investigation and the number of children removed to foster care due to parental or child substance use. These data must be requested from DSS.

Department of Public Instruction data provide information on the possession of alcohol and illicit substances on school property at the school LEA and state levels. In SFY 2007, there were 2 instances of alcohol possession and 8 instances of drug possession per 1,000 high school students. Data are reported in the Annual Report of School Crime and Violence.[h]

Higher Education Institutions are required by law to disclose crime statistics for their campuses and surrounding areas, including liquor and drug law violations if they result in an arrest or disciplinary referral. Data are available from the US Department of Education, Office of Postsecondary Education (for all public and private institutions of postsecondary education).[i]

e Data from NC-DETECT are available at: http://www.ncdhhs.gov/mhddsas/statspublications/reports/emergdeptreport10-15-08.pdf.

f The State Center for Health Statistics produces two reports with mortality data related to substance abuse. The annual Detailed Mortality Statistics report (http://www.schs.state.nc.us/SCHS/deaths/dms/2006/) includes information on deaths directly linked to substance use (i.e. harmful use, dependence and behavioral/mental disorders due to substance use). The annual Vital Statistics Report, Vol. II: Leading Causes of Death, (http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm) includes data on causes of death related to substance use such as lung cancer and chronic liver disease and cirrhosis.

g Data from Child Protective Services are available at: http://www.dhhs.state.nc.us/dss/stats/cr.htm.

h The Annual Report of School Crime and Violence can be found at: http://www.ncpublicschools.org/research/discipline/reports/#schoolviolence.

i Data about liquor and drug law violations for higher education institutions can be found at: http://ope.ed.gov/security/.

The Department of Juvenile Justice and Delinquency Prevention (DJJDP) conducts needs assessments that provide data on the needs of individuals in the system, including substance abuse services. State level data are available in the DJJDP Annual Report.[j] In 2006, 22% of juveniles assessed needed further assessment for substance abuse, and 20% needed substance abuse treatment.

Law Enforcement and Regulation data provide information on substance abuse arrests, read Alcoholic Beverage Control (ABC) and Alcohol Law Enforcement (ALE) permit violations, and drug seizures. Law enforcement data sources include the State Bureau of Investigations, Alcohol and Beverage Control, and the Drug Enforcement agency:

- The State Bureau of Investigation has data on arrests for drug offenses, DWI, drunk and disorderly conduct, and liquor law violations for the state and county.[k] In 2006, 24% of arrests were for drug or alcohol offenses.
- Data from NC Alcoholic Beverage Control and Alcohol Law Enforcement (ABC/ALE violations) must be obtained from local offices.
- The Drug Enforcement Agency has data on drug seizures, by state.[l] In 2007, over 12,000 pounds of illegal drugs were seized in North Carolina and 153 methamphetamines labs raided.

Currently, the Center for Child and Family Policy at Duke University is working on creating an online data system for all 100 counties which compiles multiple adolescent substance abuse surveillance data sources through a single portal.

Highway Safety Research Center has information on alcohol-related crashes and impaired-driving court cases.[m] Data are available at the state and county level. In 2006, 5% of crashes were alcohol-related, and there were 60,000 cases of driving while impaired.

Department of Corrections, Division of Alcoholism and Chemical Dependency Programs (DACDP) Annual Legislative Report includes state level data on inmates with substance abuse problems, inmates receiving treatment, and evaluations of the various treatment programs offered.[n] In SFY 2007, 63% of entering inmates indicated a need for residential substance abuse treatment. In total, approximately 90% of entering inmates needed some type of substance abuse treatment services.

Currently, the Center for Child and Family Policy at Duke University is working on creating an online data system for all 100 counties which compiles multiple adolescent substance abuse surveillance data sources through a single portal. The goal is to create a user-friendly single-point entry portal that will allow visitors to identify drug abuse patterns in each county, identify changes in drug abuse patterns

j Data from the Department of Juvenile Justice and Delinquency Prevention are available at: http://www.ncdjjdp.org/.

k Information from the State Bureau of Investigation is available at: http://sbi2.jus.state.nc.us/crp/public/Default.htm. Select a year, then arrests and clearances, then statewide or county.

l Information from the Drug Enforcement Agency is available at: http://www.usdoj.gov/dea/pubs/states/northcarolina.html.

m Information from the NC Alcohol Facts Website from the Highway Safety Research Center is available at: http://www.usdoj.gov/dea/pubs/states/northcarolina.html.

n Data from the Department of Corrections, Division of Alcoholism and Chemical Dependency Programs are available at: http://www.doc.state.nc.us.

over time, and detect emerging substance abuse trends. Data will come from a variety of sources including the Youth Risk Behavior Survey, the State Bureau of Investigation, and the Department of Public Instruction. Over time, data from state agencies such as the State Medical Examiner, the Department of Juvenile Justice and Delinquency Prevention, Division of Social Services, Administrative Office of the Courts, US Census Bureau, the Centers for Disease Control and Prevention, Health Resource and Service Administration, and others will be added. This project is funded by a Substance Abuse and Mental Health Services Administration grant with the North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services and the University of North Carolina at Greensboro. These data will be available online in January 2009.

Available Data for Monitoring Prevention and Treatment Services Funded Through DMHDDSAS

DMHDDSAS collects information on clients served within the DMHDDSAS system. These data include information about the individual users (i.e. demographics, financial eligibility), the number of people who seek services, the number who receive services, length of time in treatment, services rendered, the cost of services, program performance, individual outcomes, and consumer satisfaction. Data sources within DMHDDSAS include:

- ***Client Data Warehouse (CDW)*** is the hub of DMHDDSAS data for the state. It captures individual consumer demographics, financial eligibility, clinical information, and specialized substance abuse data such as drug(s) of choice. Data may be submitted by LMEs on a daily basis. CDW can be linked to the other DMHDDSAS data systems described below and may potentially be linked to other external data systems within the Division of Social Services or the Division of Public Health, although this has not been pursued due to federal regulations concerning consumer confidentiality. CDW is the basis for the annual DMHDDSAS statistical reports. Using the CDW, DMHDDSAS can generate local, state, and federal reports for the block grants.
- ***Integrated Payment and Reporting System (IPRS)*** is the behavioral health claims system for LMEs. It captures substance abuse diagnostic information; the type, date and volume of services rendered; and the cost of services.[o] The IPRS also captures state mental health and substance abuse expenditures. These data can be combined with Medicaid use and expenditure data. However, the IPRS and Medicaid data cannot currently be combined with non-state expenditures (such as county or grant funds). The IPRS will be able to report services paid through county-specific funds in SFY 2009.

o Data from the IPRS system is reported at: http://www.ncdhhs.gov/mhddsas/iprsmenu/index.htm.

- ***Healthcare Enterprise Accounts Receivable Tracking System (HEARTS)*** is a complement to the IPRS that captures information for services provided in the 14 state institutions, including ADATCs. Similar to IPRS, HEARTS collects data on individual consumer diagnostic information; the type, date, and volume of services rendered; and the cost of services.
- ***North Carolina Treatment Outcomes and Program Performance System (NC-TOPPS)*** is a Web-based performance and outcomes database.[p] DMHDDSAS requires providers to do initial, update, and discharge interviews with consumers 6 years of age or older who are receiving treatment services. NC-TOPPS captures descriptive information (i.e. demographics, drug problem, diagnoses, treatment attendance, services received), information on consumers' daily lives before and during treatment (i.e. employment, living arrangement, substance use, involvement with the law), outcomes (i.e. quality of life, participation in positive activities, behavior problems), and program performance (consumer ratings of whether treatment helped them reduce substance use and increase positive outcomes in their lives). Statewide data are available online. NC-TOPPS can be used by providers for consumer-specific, local, regional, or state planning. DMHDDSAS generates biannual reports for the state and LMEs. Reports are also run for specific providers upon request.
- ***Mental Health Statistics Improvement Program (MHSIP) Consumer Satisfaction Survey*** is administered to mental health and substance abuse consumers.[q] These surveys offer consumers a confidential opportunity to evaluate service quality based on overall satisfaction, access, appropriateness, participation in treatment, and outcomes. The surveys are administered annually but are not able to obtain information from consumers who drop out of treatment. DMHDDSAS is currently reevaluating the survey methodology in order to expand the frequency of the survey administration and size of the survey sample.

Division of Mental Health, Developmental Disabilities, and Substance Abuse Services data do not include information on patients receiving treatment in the private sector or services funded through self-pay, grants, private partnerships, or expenditures for prisoners treated in jail treatment programs.

It is important to note that these data do not include information on patients receiving treatment in the private sector or services funded through self-pay, grants, private partnerships, or expenditures for prisoners treated in jail treatment programs. County expenditures have not previously been included in DMHDDSAS data but will be collected in SFY 2009.

p NC TOPPS data are available at: http://www.ncdhhs.gov/mhddsas/nc-topps/index.htm.
q The 2005-2006 consumer satisfaction report is available at: http://www.ncdhhs.gov/mhddsas/statspublications/reports/consumersatis/consumersatisreport05-06.pdf. More recent data are available at: http://www.ncdmh.net/dsis/CSS_Combined_Menu.html.

Gaps in DMHDDSAS Data Collection

Although there are a number of data sources providing state-level data on substance abuse prevalence, there are far fewer sources of comparable information at the county or regional level. LMEs need enhanced data on substance abuse prevalence at the local level. While data on treatment and outcomes in their areas are available, LME utilization of this information needs to be strengthened in order to enhance planning to ensure that there is adequate capacity at the local level to respond effectively.

The state collects extensive information on substance abuse prevention efforts locally but does not currently assess whether such prevention efforts are impacting community and family norms and behaviors. The North Carolina Prevention Outcomes and Performance System was implemented in July 2009. This online system collects information from providers on the impact of prevention services. It will allow evaluation of prevention efforts in coming years.

Local Management Entities need enhanced data on substance abuse prevalence at the local level.

While DMHDDSAS collects a vast array of data, there are some limitations in the current data systems. For example, data are not always reported consistently across LMEs (especially among LMEs that operate managed care systems). LMEs and providers do not always report their required data fully or accurately. This has been particularly problematic in the collection of timely and complete data through NC-TOPPS. Further, the multiple systems that the Division utilizes for the collection of data are not integrated, but are stand-alone systems serving one specific purpose, including NC-TOPPS.[r] The Division does not have sufficient staff capacity to analyze all the captured data or identify trends. If data collection were enhanced and analyzed, programs and services could be better informed.

The DMHDDSAS is currently developing and implementing an electronic health record system in the state facilities, including the Alcohol and Drug Abuse Treatment Centers (ADATCs). This system is a customization of the Veteran Administration's VistA system. It will allow real-time access to information on consumers' needs and services to all state facility staff involved in their care. In order for LMEs to provide good coordination and continuity of care between ADATCs and community providers and among community providers, a similar electronic health record system is needed for community services. This electronic health record must be able to connect to medical providers as well other substance abuse professionals.

The Task Force was particularly interested in identifying appropriate performance measures to gauge individuals' interactions with their LME. As part of the DHHS-LME Performance Contract, the DMHDDSAS currently tracks LME performance against annual statewide standards and targets for five measures specific to substance abuse services, including treated prevalence for adults and adolescents, timely initiation and engagement in services, and timely follow-up care after discharge from an

r The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services is planning an evaluation of their data systems. One issue they will evaluate is whether it is possible to integrate the different data systems.

ADATC. These measures are based on the work of national experts in the Washington Circle Public Sector Workgroup.[3] An additional seven measures track LME performance on all three disabilities combined. These include timely access to services after initial requests for emergent, urgent or routine care; overuse of state psychiatric hospitals for acute care (including substance abuse consumers); 30-day and 180-day readmissions to state psychiatric hospitals; and child services in non-family settings. Similar standardized measures and standards have not yet been set for evaluating providers' performance statewide, although some LMEs have developed local performance measures for their community providers. If payments are ultimately linked to LME or provider performance measures—for example, through incentive-based performance payments—then the state needs to ensure that organizations do not selectively serve low risk consumers, while eschewing more complex consumers, in order to enhance their perceived performance and payments.[4]

To enhance the state's data collection system, the Task Force recommends:

Recommendation 7.1

a) The Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMDDSAS) should develop a long-term consumer-centered Information Technology (IT) vision and plan to meet the state's data needs through enhanced integration of current systems, including the statewide adoption of an Electronic Health Record among community providers and LMEs.

b) The North Carolina General Assembly should appropriate $1.2 million in recurring funds to DMHDDSAS to enhance and expand current data collection systems and develop new data systems as needed to provide epidemiological information on people with substance abuse issues across the lifespan.

c) The DMHDDSAS should develop capacity to utilize data to identify patterns and trends in the prevalence, prevention, and treatment of substance abuse so as to provide an evidence-based process for the development and evaluation of prevention and treatment interventions, as well as provide a data-driven platform for the funding of prevention and treatment programs across the state.

d) The DMHDDSAS should review national research on patterns of consumer participation and client referral within the substance abuse prevention and treatment systems. Special studies should be undertaken as needed to determine if there are systemic patterns and barriers to identification, referral, and engagement of substance abuse consumers into treatment in North Carolina.

e) The DMHDDSAS should enhance their collection and analysis of data on substance abuse services to include information on:

1) Active identification and timely screening, triage, and referral into care for substance abuse consumers separately from other disability groups.

2) Timely and effective coordination of care between screening, triage, and referral (STR) and engagement in treatment.

3) **Length of time in treatment.**

4) **Responsiveness of community systems, including utilization of inpatient programs, as is currently done for detox and outpatient programs.**

5) **Admission and readmission into Alcohol and Drug Addiction Treatment Centers, as is currently done for state hospitals.**

6) **Continuity of care after discharge from detox and inpatient programs, as is currently done for Alcohol and Drug Addiction Treatment Centers, and state hospitals.**

7) **Provision of recovery-oriented treatment and support within communities.**

In addition to improving data collection, analysis, and evaluations of current programs, the Task Force also focused on the need for more comprehensive data about the various funding streams for substance abuse services. DMHDDSAS currently collects data on services funded through DMHDDSAS and Medicaid and will soon collect data on services funded through county expenditures. DMHDDSAS data do not include information on people receiving prevention and treatment services in the private sector or services funded through self-pay, grant, private partnerships, or expenditures by other state agencies (e.g. the Department of Corrections or the Department of Public Instruction). Although DMHDDSAS may not be able to collect data on services funded through insurers, grants, or out-of-pocket payments, obtaining information on services provided through all federal, state, and local funds will give a more complete understanding of the availability and gaps in the current service system. Therefore, the Task Force recommends:

Recommendation 7.2

a) **The Department of Juvenile Justice (Juvenile Crime Prevention Council), Department of Corrections (Criminal Justice Partnership program), Division of Public Instruction, Division of Social Services, Division of Public Health, and county commissioners should provide data to the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services quarterly on public funds used to support substance abuse prevention and treatment services, number of people served, and types of services provided in each county.**

b) **The North Carolina General Assembly should choose and implement an equalization formula to ensure that Local Management Entities (LMEs) receive comparable funding to achieve equity in access to care and services while recognizing the inherent challenges of delivering services in low-wealth rural counties. This equalization formula should be used to distribute any new state funds provided to support substance abuse prevention and treatment activities, with low-funded LMEs obtaining a higher proportion of the funding.**

References

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