Chapter 2
A Case Study in Gaps in Services for Drug-Involved Offenders

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Introduction

The US correctional system is a de facto health service provider because at any given time, nearly eight million offenders are under its control (seven million adults and nearly 650,000 youth), and many of these offenders are in need of physical, mental health, and substance abuse services (Binswanger, Krueger, & Steiner, 2009; Glaze & Bonczar, 2006, 2008; Taxman, Young, Wiersema, Rhodes, & Mitchell, 2007). The seven million adults represent nearly 5 % of the adult population in the US (ages 18–65), and the 650,000 youth represents about 4 % of youth in the 13–18 age range. The prevalence of substance use disorders in this population is reported to be nearly 70 % (Glaze & Bonczar, 2006; Karberg & James, 2005; Mumola & Bonczar, 1998), and substance abuse disorders are 4 times more likely among offenders than the general population (SAMHSA, 2006a). Despite strong evidence that substance abuse treatment is an effective strategy to reduce drug use and increase public safety (Chandler, Fletcher, & Volkow, 2009), significant gaps exist in the service delivery system both within the justice system and the substance abuse treatment system at large. This is the purported problem, but there has been little documentation of what the service gap is or how this service gap affects potential outcomes.

The 2005 National Criminal Justice Treatment Practices (NCJTP) survey illustrates that a wide array of services are provided across the spectrum of correctional settings (Taxman, Perdoni, & Harrison, 2007),[1] but the capacity for serving the

[1]For a discussion on juvenile justice settings, see Young, D. W., Dembo, R. Henderson, C. E. (2007). A national survey of substance abuse treatment for juvenile offenders. *Journal of Substance Abuse Treatment*, 32:255–266.

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offender population is very low with an even smaller proportion of offenders having access to appropriate services. As noted by Tucker and Roth (2006), a population impact is a function of three factors: size of the target population, intervention utilization, and effect size. That is, outcomes will be enhanced by exposing the largest percentage of the population to the intervention. For example, a vaccine is not going to eradicate a disease if the vaccine is not delivered to a large enough proportion of the potential target population. Better, and more desirable, findings are known to occur when larger proportions of the population are treated. Few examples exist that assess either the degree to which the intended pool is receiving the appropriate type of services or the impact on desired outcomes like reduced substance abuse and reduced recidivism.

In this chapter, we use two types of simulation models to illustrate the impact of treatment matching on the ability of the justice system to improve recidivism outcomes. We begin with an illustration of the concept of treatment matching in substance abuse treatment where there is more agreement as to the types of substance use disorders that should be placed in different types of treatment programming. In the following case study, we illustrate the components of the matching process in a discipline where there is more clarity in terms of standards regarding placing substance abusers into appropriate levels of care. After we illustrate some of the criteria, we then focus on the gap analyses.

This chapter illustrates the concepts which provide the theoretical framework underlying the simulation model. It provides a model for responsivity for offending behavior that focuses on criminal justice risk, offending behavioral health, and placement criteria. The proposed system incorporates the constructs of the risk, need, and responsivity (RNR) model (Andrews & Bonta, 2003; Taxman & Marlowe, 2006) to maximize the reduction in recidivism by focusing on appropriate placement of offenders in treatment services.

A Case Study of Substance Abusers in the Justice System

The current criminal justice and health systems provide drug treatment services to approximately 10 % of the offender population in need of care (Taxman, Perdoni, & Harrison, 2007). Furthermore, individual level data shows that less than 20 % of offenders have been in treatment services during their period of incarceration (Beck, 2000); this percentage is lower still for offenders under probation or parole supervision (Mumola & Bonczar, 1998). A population impact could be achieved by increasing the service delivery to 30 or 40 % of the population, but only if offenders are targeted for the appropriate levels of care. Reducing recidivism is only possible by providing a larger percentage of the offender population with appropriate treatment services.

One challenge in modeling the intended benefits is that the existing data are often lacking. Existing studies examine offender participation in treatment on a daily basis—often referred to as "stock." However, "stock" measure provides only

a limited perspective, because access is affected by the "flow" through treatment programs and services each year, not just the daily populations. This chapter focuses on the annual flow of offenders through the correctional system and their exposure to treatment services while under supervision. The annual flow is relevant because many offenders are involved in the justice system for less than 18 months (see Appendix A). A focus on the annual flow provides a more accurate depiction of the potential for treating offenders while under supervision and allows for an assessment of offenders' impact on and utilization of community health systems.

The Issues of Substance Abuse and Health Problems Among the Adult Offender Population

Research shows that the majority of adult offenders has diagnosable substance abuse disorders and at rates much higher than that of the general adult population. Although less than 10 % of the general population of adults are characterized as dependent or abusers (SAMHSA, 2006b), Mumola and Karberg (2006) report that 53 % of prison inmates meet such criteria. Over 80 % report prior drug use, and almost 60 % use in the month leading up to arrest (Mumola & Karberg, 2006). Nearly 70 % of jail inmates can be classified as either drug dependent or abusers, and over half (55 %) use in the month prior to arrest (Karberg & James, 2005). Half of the community-based offender population uses drugs regularly, and over 30 % use in the month leading up to their immediate offense (Mumola & Bonczar, 1998).

Substance abuse not only plays a role in the day-to-day lives of offenders but is often a factor in offending behavior. One-third of prison inmates were under the influence when committing their instant offense (Mumola & Karberg, 2006), as were approximately 30 % of jailees (Karberg & James, 2005) and 14 % of probationers (Mumola & Bonczar, 1998). Data from the Arrestee Drug Abuse Monitoring program (ADAM) shows that approximately 70 % of both males and females tested positive for one or more illicit substances upon arrest and that this rate remained relatively consistent over the study's 2 decades of data collection (ADAM, 2000). Taylor and colleagues (Taylor, Fitzgerald, Hunt, Reardon, & Brownstein, 2001) found that nearly one-quarter of male (23 %) and female (24 %) arrestees tested positive for two or more drugs. Roughly 20 % of prison and jail inmates report that they committed their immediate crime in order to purchase drugs (Karberg & James, 2005; Mumola & Karberg, 2006). James reports that one-quarter of persons in jail are confined for a drug offense (James, 2004), as are 20 % of prisoners (Sabol, Couture, & Harrison, 2007) and nearly 30 % of probationers (Glaze & Bonczar, 2007).

The offender population also displays higher rates of health disorders, which may complicate health issues. These problems are further complicated, and sometimes driven, by their substance use. Due in part to the exposure to substance abuse and violence in the communities to which they return, offenders released after periods

of incarceration have higher than average fatality rates (Binswanger et al., 2007). These environments have also been found to couple with physiological factors to trigger drug cravings (Chandler et al., 2009; Grimm, Hope, Wise, & Shaham, 2001; Volkow et al., 2006), and the communities themselves are negatively impacted by offenders' health problems (Freudenberg, 2001). The adult offender population is far more likely than the general public to be infected with HIV/AIDS (Maruschak, 2004; Weinbaum, Sabin, & Santibanez, 2005) and other health problems like diabetes and high blood pressure (Hammett, 2001). With the exception of diabetes, angina or myocardial infarction, and obesity, offenders tend to have higher odds of other medical disorders than the general population with some variation based on the correctional setting (Binswanger et al., 2009). Over 30 % of the confined offender population is infected with Hepatitis C (Beck & Maruschak, 2004), as compared to less than 2 % of the general public (CDC, 2008). Approximately 60 % of prison and jail inmates suffer from mental health problems (James & Glaze, 2006), and it has been estimated that roughly 20 % of prisoners, jail inmates, and offenders under community supervision could classify as mentally ill (Ditton, 1999). Often, these mental health problems are accompanied by substance abuse disorders (Abram, Teplin, McClelland, & Dulcan, 2003). The offender population exhibits behaviorally and medically complex disorders that are difficult to treat.

Treatment Services in the Criminal Justice System

The nexus between substance abuse and criminal involvement provides evidence of the importance of addressing offender's risk behaviors while they are involved with the justice system. Glaze and Bonczar (2007) estimate that out of every ten parolees exiting supervision, four have been unsuccessfully terminated from supervision. Of every five exiting probationers, one is terminated from supervision. Estimates have also shown that roughly 70 % of prisoners recidivate within 3 years after release (Langan & Levin, 2002). Common to all of these figures is that reincarceration or violation of supervisory terms is often the result of positive drug tests or failure to comply with treatment plans.

Despite the overwhelming need for services (Binswanger et al., 2007; Chandler et al., 2009; Glaser & Greifinger, 1993; Hammett, Gaiter, & Crawford, 1998; Hammett, Harmon, & Rhodes, 2002), the criminal justice system does not recognize its role as a service provider (Taxman, Henderson, & Belenko, 2009). Studies have shown that the availability of and access to treatment while involved in the justice system is minimal. A recent study provides nationally representative estimates on the availability of treatment services across all correctional settings (Taxman, Perdoni, & Harrison, 2007). These findings show that substance abuse treatment services are sparse, and when they are provided, they tend to be inadequate for dealing with the severity of the problems presented. More importantly, the survey findings show that intensive treatment services (defined as more than a single counseling session a week) are rarely offered, and they are provided

to few offenders in the system. Drug and alcohol education and outpatient counseling are most prevalent throughout the system. Three-quarters of prisons offer drug and alcohol education, as do 53 % of community agencies and 61 % of jails. Just over half (55 %) of prisons provide under 4 hours of group counseling per week, as do 47 % of community agencies and 60 % of jails. This distribution of services is inconsistent with the severity of the substance abuse disorders reported by offenders (Belenko & Peugh, 2005).

Intensive treatment services—intensive outpatient (5 or more hours a week), therapeutic community, and drug treatment courts—would be more appropriate for the justice-involved-dependent population given the severity of substance abuse. However, less than half of prisons offer 5 hours or more of group counseling per week, compared with 30 % of community agencies, and roughly one-quarter of jails (Taxman, Perdoni, & Harrison, 2007). Twenty percent of prisons provide therapeutic communities, as do 26 % of jails and 3 % of community correctional agencies. Furthermore, the capacity to provide services is relatively low, and only a small number of offenders can participate in them (Chandler et al., 2009).

The prominence of substance problems among the offender population and astonishing rates of recidivism support the notion that these issues are interrelated. Seventy-five percent of the overall offender population is supervised in community settings. As illustrated above, this segment of the offender population possesses the same risk and need characteristics as prison and jail inmates. Thus, by failing to address the mental and physical health and addiction problems displayed by the offender population, the criminal justice system exposes community health to unnecessary risks.

Methods of the NCJTP Survey Used in Modeling Treatment Placement

The NCJTP survey consists of a representative sample of prisons, jails, and community correctional agencies (Taxman, Young et al., 2007). We began with facilities listed in the Bureau of Justice Statistics' (BJS) 2000 census of prisons to generate the prison portion of the sampling frame (Stephan & Karberg, 2003). Federal prisons, prisons devoted to medical or mental health treatment, and prisons categorized as community corrections facilities were not included in the study. From the remaining facilities, prisons specializing in drug and alcohol treatment were sampled with certainty ($n=58$). The remainder of the sample was generated by selecting prisons from this frame using the methodology employed by BJS for their national surveys of prisons. In the first step of this method, the county was broken into regions representing the South, West, Midwest, and Northeast, and the four states with the largest correctional populations were classified separately, resulting in eight regions. Within these eight strata, facilities were chosen randomly with the probability of selection proportionate to the size of the facility's daily population. Ninety-two additional prisons were selected using this technique.

There is not a complete listing of community corrections agencies, since many are operated by state or local agencies. Therefore, we generated a sampling frame using a two-stage stratified cluster technique. The first stage was the selection of counties from within the 3,141 US counties or county equivalents. We used the same technique that was used for the selection of the prison sample by stratifying the eight national regions by the size of the county's population. County population included three categories: "small" (less than 250,000), "medium" (250,000–750,000), and "large" (more than 750,000). From the resulting 24 strata, we selected counties with populations over three million with certainty and again utilized the probability proportional to size technique to generate a sample of 72 counties. The second stage was the selection of correctional programs and services within the 72 counties, resulting in a sample of 644 facilities.

Survey instruments were mailed to wardens, chief probation and parole officers, and other facility administrators. The survey contained questions on daily facility operations, gathered demographic information on the administrator and the facility, and collected data on funding, treatment practices, attitudes and philosophies on treatment and service delivery, screening and assessment practices, integration with outside agencies, management techniques, and other questions on facility and offender management. A response rate of 70 % was attained for the prison sample and a response rate of 71 % attained for the community sample.

Sampling weights were also developed for the data. For the prison sample, we assumed that nonrespondents were missing at random. We developed weights based on the probability of selection, adjusted the sampling weights for nonresponses (Elliot, 1991), and trimmed excess values (Potter, 1988, 1990). A similar process was followed for the community sample, though values were not adjusted for nonresponse (Taxman, Young et al., 2007).

Modeling the Findings

Average daily populations: The NCJTP survey polled administrators on the types of treatment services available in their facilities, as well as the number of offenders in these various programs on any given day. We applied the sampling weights to the survey data to estimate the average daily population (ADP) of offenders in the various treatment services in all US correctional agencies. These estimates are represented in the column titled "Average Daily Population in Services" in Tables 2.1, 2.2, and 2.3.[2]

[2]For more detailed information on the daily populations and access rates reported in Tables 2.1, 2.2, and 2.3, see Taxman, F. S., Perdoni, M. L., & Harrison, L. D. (2007). Drug treatment services for adult offenders: The state of the state. *Journal of Substance Abuse Treatment*, 32:239–254. It should be noted that one adjustment occurred in these tables to account for an adjustment of the classification of one unit from a jail facility into a community corrections facility.

Table 2.1 Estimate of offender treatment needs and annual flow through treatment services in prisons

Average daily population of adults in prisons: 1,233,867					
Service	Average daily population in services	Daily population in need of treatment	Est. population receiving services Conservative Model (1) (% population receiving appropriate treatment)	Est. population receiving services Liberal Model (2) (% population receiving appropriate treatment)	Est. % population flowing through services annually (range)
Alcohol and drug education	75,543	N/A	83,683 (N/A)	100,591 (N/A)	6.8–8.2
Low intensity	34,618	238,963	58,245 (24.4)	70,377 (29.5)	4.7–5.7
Medium intensity	64,475	228,574	47,919 (21.0)	56,102 (24.5)	3.9–4.5
High intensity	45,487	406,633	57,833 (14.2)	69,953 (17.2)	4.7–5.7
Total in clinical services*	144,580	874,170	163,997 (18.8)	196,431 (22.5)	13.3–15.9
Total adjusted for phased treatment structures			150,948 (17.3)	180,826 (20.7)	12.2–14.7

*Excludes drug and alcohol education

Estimating need for different levels of treatment services: We reviewed the literature on severity of substance use disorders among the correctional population to generate estimates on the number of offenders with substance abuse disorders in need of clinical treatment services. Belenko and Peugh estimate that 31.5 % of male prisoners are substance dependent, 18.7 % have a serious abuse disorder, 20.2 % are abusers, and 29.6 % have no substance abuse problem (Belenko & Peugh, 2005). Female prisoners have a higher rate of dependence, with 52.3 % falling within this classification, while 16.2 % have a serious abuse disorder, 8.3 % are classified as abusers, and 23.2 % have no substance abuse problem requiring treatment. These figures mirror those reported in other studies for jail inmates and community-based offender populations (BJS, 2004; Taylor et al., 2001). We used these estimates to determine levels of service need.

Given that there are gender differences in the severity of the problem, the next step was to account for gender breakdowns across all settings. According to Harrison and Beck (2006), 93 % of prisoners are male and 7 % are female, and 87 % of jail inmates are male and 13 % female. Glaze and Palla (2005) report that 77 % of probationers are male and 23 % female and that 88 % of the parolees are male and 12 % are female.

We then generated estimates of the number of offenders with some type of substance problem in the criminal justice system on any given day. First, sampling

Table 2.2 Estimate of offender treatment needs and annual flow through treatment services in jails

Average daily population of adults in jails: 745,765					
Service	Average daily population in services	Daily population in need of treatment	Est. population receiving services Conservative Model (1) (% population receiving appropriate treatment)	Est. population receiving services Liberal Model (2) (% population receiving appropriate treatment)	Est. % population flowing through services annually (range)
Drug and alcohol education	46,071	N/A	130,217 (N/A)	157,874 (N/A)	17.5–21.2
Low intensity	43,334	139,374	102,241 (73.4)	125,484 (90.0)	13.7–16.8
Medium intensity	16,674	137,090	14,891 (10.9)	18,178 (13.3)	2.0–2.4
High intensity	11,578	254,616	14,350 (5.6)	16,833 (6.6)	1.9–2.3
Total in clinical services*	71,586	531,080	131,482 (24.8)	160,495 (30.2)	17.6–21.5
Total adjusted for phased treatment structures			73,670 (13.9)	90,046 (17.0)	9.9–12.1

*Excludes drug and alcohol education

weights were applied to the data, and estimates of the ADP in each setting were generated. These estimates were then split by the gender breakdowns listed above. Finally, the prevalence of substance abuse disorders reported by Belenko and Peugh was applied. This figure is represented in the column titled "Daily Population in Need of Treatment" in Tables 2.1–2.3.

Matching offender need to treatment services: The next step was to categorize treatment services by their levels of intensity. The risk, need, and responsivity (RNR) model suggests that offenders should be assigned to services based on the seriousness of their risk of recidivism and the severity of their problem behavior (such as substance abuse, mental health disorders, sexual deviance, histories of violence) (Taxman & Marlowe, 2006). This model resembles the Patient Placement Criteria (PPC) recommended by the American Society of Addiction Medicine (ASAM) for substance abuse (Graham, Schultz, Mayo-Smith, & Ries, 2003). The RNR and PPC models are built on the premise that the severity of the problem disorder should control the duration, design, content, and type of service delivered. Together, these models suggest the following service categorization. Individuals with dependent disorders should participate in more *intensive services* than those with threshold disorders. For those with dependent disorders, intensive services involve more frequent interaction with counselors and a therapeutic community setting. Intensive

Table 2.3 Estimate of offender treatment needs and annual flow through treatment services in community correctional facilities

Average daily population of adults in community corrections: 5,864,152					
Service	Average daily population in services	Daily population in need of treatment	Est. population receiving services Conservative Model (1) (% population receiving appropriate treatment)	Est. population receiving services Liberal Model (2) (% population receiving appropriate treatment)	Est. % population flowing through services annually (range)
Drug and alcohol education	192,072	N/A	310,277 (N/A)	373,974 (N/A)	5.3–6.4
Low intensity	145,070	1,035,572	237,949 (23.0)	288,351 (27.8)	4.1–4.9
Medium intensity	40,520	1,065,295	38,189 (3.6)	44,431 (4.2)	0.7–0.8
High intensity	27,987	2,107,622	25,286 (1.2)	28,966 (1.3)	0.4–0.5
Total in clinical services*	213,577	4,208,489	301,425 (7.2)	361,748 (8.6)	5.1–6.2
Total adjusted for phased treatment structures			281,693 (6.7)	338,834 (8.1)	4.8–5.8

*Excludes drug and alcohol education

outpatient counseling services (offered for 5 or more hours per week), considered *medium intensity*, are more appropriate for individuals who do not use substances daily and whose use does not interfere with daily functioning. *Low-intensity* outpatient counseling services, including those providing infrequent counseling and some type of pharmacological medications (like methadone maintenance), are suited for individuals with low-threshold disorders. This categorization of service intensity is reflected in Tables 2.1–2.3.

Flow of offenders through treatment services: In this study, we develop two models for measuring the annual flow of offenders through treatment service. These models are based on the number of times per year a facility offers a particular treatment program and the retention rates in these programs. The number of times a program can be offered in a year is determined using the duration of the reported program.[3] As shown in Appendix A, Model 1, a more conservative model assumes that treatment programs are offered less frequently (fewer times per year), while Model 2, the more liberal model, assumes that programs are offered more frequently (more

[3]When respondents indicated multiple durations for a single program, we used the response indicating the shorter duration.

times per year than assumed in Model 1). We do not assume that these programs are offered in "closed group" formats, where all offenders enter and leave on specific and common days. Using estimates from prior studies, we assume that retention rates in residential programs are approximately 65 % (Joe, Simpson, & Broome, 1999; Martin, Butzin, Saum, & Inciardi, 1999) and retention rates in other services are approximately 55 % (Joe et al., 1999). The retention rate figures are used to reduce the estimates of offenders receiving care each year.

The models also adjust estimates for the number of offenders participating in various services as a *part* of a total treatment program. In these "phased treatment structures," offenders participate in more than one service at a time. Drug and alcohol education is often the first phase of a layered treatment program. Thus, if the agency administrator reported that the number of offenders in drug and alcohol education is equal to the number of participants in other services, then we assume it is a phased treatment structure. Furthermore, if the facility offered three or more services with the same enrollment, we assume each is part of a phased structure. We adjusted the annual population estimates by counting the enrollment in the individual services making up the phased treatment structure only once.[4] Overall, 13 % of facilities offer services through a phased structure.

Estimates of the annual flow through treatment services were generated by multiplying the number of times per year that the service can be offered by the number of offenders in the program and then reducing this estimate by the retention rate assumptions. The calculation was completed for each group of services (high-, medium-, and low-intensity classifications) using the criteria described above. The sampling weights were applied to the data to generate national estimates of the flow of offenders through the services. The model also generates estimates adjusted for the population participating in phased treatment structures.

Results from the Model

The following tables report the capacity of the correctional system to provide services through their facilities or in conjunction with outside agencies.

Prisons: As shown in Table 2.1, 874,170 of the 1.2 million offenders in prisons likely need some form of clinical substance abuse treatment, but the actual number receiving appropriate care on the average day is under 145,000. Between 163,997 (Conservative Model (1)) and 196,431 (Liberal Model (2)), prisoners complete treatment programs annually. After adjusting for phased treatment structures, the flow estimate ranges between 150,948 and 180,826 offenders, respectively.

[4]The count of services in each case was also factored into this process. If a facility reported that they provide four or more services, the threshold value was set at 3. However, when the facility reported three services, the criteria for determining phased programming was set at a minimum of two identical values, and when the facility reported two services, the criteria was at least one identical value.

Overall, most prisoners have access to less intensive services, geared for those with low-threshold disorders. Although a higher proportion of prisoners complete low- (under 5 hours of group counseling and methadone) and high-intensity (therapeutic communities) programs each year than in other settings, these estimates still represent only a small percentage of the population in need.

Jails: Table 2.2 provides flow estimates for jails. Over 531,000 of the 745,765 inmates in US jails are in need of some level of treatment services on any given day. However, the daily capacity for providing services is low, as only 71,586 (14 %) of jail inmates have access to treatment daily. The annual participation rate ranges from 131,482 (Conservative Model (1)) to 160,496 (Liberal Model (2)) jail inmates.

The annual flow estimates for jails drop considerably after the models are adjusted for phased programming. It is estimated that over 40 % of the population of jail inmates completing particular services each year participate as a part of a phased treatment structure. Furthermore, the post-adjustment estimate of annual completions in the Conservative Model (1) is roughly equal to the estimate of jailed people in clinical treatment programs on any given day.

Community corrections: Table 2.3 shows the estimated treatment need and annual completions in community correctional settings. Seventy percent of the offenders under community supervision have some type of substance use disorder, meaning that about 4.2 million need clinical treatment services. On any given day, only 213,577 receive such care (5 %). The annual flow through community-based programs ranges from 301,425 to 361,748 offenders. After adjusting for phased treatment structures, the estimates drop to 281,693 under the Conservative Model (1) and 338,834 under the Liberal Model (2). Like prisons, about 6 % of annual completions in community corrections participate in phased treatment structures.

Annual completion estimates are lowest for high-intensity services. Under the Conservative Model (1), an estimated 25,286 offenders complete high-intensity services annually, as opposed to 237,949 for low-intensity treatment services, and 310,277 for drug and alcohol education. Under the Liberal Model (2), an estimated 361,748 offenders complete clinical services each year, of which 288,000 complete low-intensity programming. Thus, high-intensity service completions account for roughly 8 % of the total annual completions in community-based settings, while low-intensity services account for nearly 80 %.

Correctional programming: Correctional programs, such as intensive supervision, work release, and day reporting, are designed to be graduated sanctions that intensify the supervision of offenders in the community. Often these programs are designed to address offenders that have a high-risk profile. Treatment services are a frequent component of these programs, although most of the provided treatment services fall within the range of educational and/or infrequent counseling type of services.

As shown in Table 2.4, half of the agencies providing intensive supervision (53 %) and transitional housing (50 %) programs incorporate treatment services as a part

Table 2.4 Prevalence of treatment services within correctional programs

Program	% Agencies	% With programs that include SA treatment services	% With services that include drug and alcohol education	% With services that include counseling services	% With services that include medium-intensity services	% With services that include high-intensity services
Day reporting	10.8	19.2	93.2	54.4	56.4	54.1
Intensive supervision program	41.1	52.6	92.3	81.0	55.2	11.8
Work release	22.2	39.0	90.1	82.1	21.2	62.9
Transitional housing	15.0	49.5	92.5	75.8	65.7	23.6
Vocational training	28.4	29.7	97.4	70.9	86.4	17.3
Education	48.5	17.0	94.7	51.9	41.7	32.0

of their program structure.[5] Much less common is the inclusion of services in other correctional programs, such as education (17 %), day reporting (19 %), and vocational training (30 %). Almost all facilities including treatment within correctional programming provide drug and alcohol education (over 90 % across all such programs), but rates drop drastically when the focus shifts to more intensive treatment services. Typically, as the intensity level increases, the less likely it is a service modality is incorporated into a program—much like the trends observed for treatment services in general discussed in the previous sections. While 81 % of the intensive supervision programs including treatment provide low-intensity services, 55 % incorporate medium-intensity services, and only 12 % include high-intensity services. Although 76 % of the transitional housing programs including treatment provide low-intensity services, 66 % include medium-intensity services, and 24 % include high-intensity services. Overall, the availability of high-intensity services within correctional programs is low, ranging from 12 % (intensive supervision) to 63 % (work release).

The Importance of Modeling RNR and Bringing the System Closer to Best Practices

Effective public health and public safety strategies emphasize the importance of risk reduction as a primary goal. For public health, the desired reductions are focused on physical and psychological health, including reduced substance abuse. Public

[5] For information on the availability of treatment services within correctional programs by criminal justice setting, see Taxman, F. S., Perdoni, M. L., & Harrison, L. D. (2007). Drug treatment services for adult offenders: The state of the state. *Journal of Substance Abuse Treatment*, 32:239–254.

safety is concerned about reducing the odds of being involved in criminal behavior, particularly personal and violent crimes. The value of providing quality drug treatment services to offenders cannot be understated since all evidence points to ineffective programs having little to no impact on offender outcomes (Cullen, Myer, & Latessa, 2009).

Although it is well acknowledged that offenders in the correctional system need substance abuse treatment services, this study puts a face on the concerns about the dearth of services available. The study measures the current capacity of the correctional and public health systems to provide substance abuse treatment services, both in terms of overall capacity but more importantly the capacity to provide the appropriate level of care. First, using a clinically based definition for substance use disorders (defining the problem severity), this case study illustrates that half of the offenders do not have a substance use disorder that requires any intervention or services. While some might have low-threshold substance use behaviors, these behaviors do not warrant the need for treatment services. For the other half of offenders that are in need of substance abuse treatment services, the existing system is woefully inadequate. For these individuals with severe substance abuse disorders, the typical treatment programs available are geared towards those with low-threshold disorders. Second, the study finds that for the total offender population (i.e., regardless of setting) anywhere between 7.6 and 9.2 % of offenders, on an average day, can participate in some type of programming and/or treatment program. This low capacity illustrates one of the compelling problems for the correctional system: providing few services or having limited access to services illustrates that service delivery is not a priority, as determined either by correctional administrators or by funding agencies. Low capacity for providing access to services affects both the ability to deter or rehabilitate criminal behavior, and even more importantly it negatively impacts the ability of the correctional culture to embrace programs and services as part of the core operations. Low capacity means that services operate at the margin of the mission of correctional agencies perpetuating the competing correctional values of punishment vs. effective treatment services.

The analytical framework for this case study provides a roadmap for addressing service gaps in this difficult policy arena of providing treatment services for drug-involved offenders. The need to expand the array of services in the community has been a consistent theme for nearly 2 decades. Potter (1990) recommended a set of intermediate sanctions (e.g., day reporting centers, work release, intensive supervision) to provide better oversight and management of the offender population in the community. This occurred concurrently with the development and implementation of drug treatment courts which served to provide a novel approach for increasing access to treatment services for offenders, followed by the design and implementation of Residential Substance Abuse Treatment services in prisons (and jails) with continued care in the community.

In 2001, the Serious and Violent Offender Initiative (SVORI) was built on the premise that more services and programs were needed to reduce the risk of recidivism, yet there is little to suggest that providing such services had an impact (Lattimore et al., 2010). As shown in this case study, and companion studies,

treatment programs for the most part continue to exist at the margins, and even correctional programs such as intensive supervision and work release are providing to a relatively small percentage of the population that could benefit from these services (see Taxman, Perdoni, & Harrison, 2007 for a discussion). The challenge to the system is not only to provide substance abuse treatment services but as Potter (1990) identified earlier to expand the variety of community programming.

The analytical framework used in this study should apply to other critical areas where there is a need to better understand how the available programs match the criminal risk of offenders or other psychosocial needs (i.e., mental health, sexual deviancy, education deficits). As far as we know, there has been no systemic analysis of criminal risk levels (propensity to commit criminal behavior) and the type of appropriate programming that will serve to reduce the risk of recidivism. Yet, meta-analyses exist that demonstrate the efficacy of drug treatment courts (Mitchell, Wilson, Eggers, & MacKenzie, 2012), in-prison treatment and aftercare (Wilson, Mitchell, & MacKenzie, 2006), work release and education programs (Wilson, Gallagher, & MacKenzie, 2000), and intensive supervision (MacKenzie, 2006) that demonstrate the value of different programs, and there are a host of other correctional programs that are available that theoretically reduce the likelihood of recidivism such as electronic monitoring, home arrest, and transitional housing. Unlike the ASAM criteria that deal with patient placement for substance abuse disorders, no such industry standards exist regarding the appropriate level of supervision or programming (care) for offenders presenting different risk portfolios.

For programs that are designed to safely manage the offender in the community, more research is needed to define the types of programs that are needed for different risk portfolios of offenders. And, standards are then needed for the programs. It is recognized that a need exists to implement a cadre of programming that serve to address the risk factors along with the other areas that serve to propel people to continue their criminal behavior. The evidence-based practices literature consists of this theme that diagnostics should drive programming (see Andrews & Bonta, 2003; Taxman & Marlowe, 2006) and that by failure to do so illustrates that "quackery" guides action instead of professionalism (Cullen et al., 2009; Latessa, Cullen, & Gendreau, 2002).

The roadmap that derives from a risk, need, and responsivity (RNR) framework for service delivery is that the appropriate level of care will be a major consideration given towards efforts to reduce the risk for recidivism and other important behaviors such as drug use and risky behaviors. A focus on this model holds the promise of advancing the adoption of quality services that are suitable to reduce the risk of recidivism. In the criminal justice lexicon, risk is synonymous with punishment severity; in the treatment arena risk should indicate the need for more intensive, structured services that address multiple dimensions. For example, consider the following illustration of an RNR approach that links criminal justice risk to substance abuse severity (Fig. 2.1 below). Here, the level of programming would be associated with risk factors, and the available services would be used to address the severity of the problem disorder (substance abuse) given the criminal justice risk factors. Low-risk offenders would be offered less services unless they have a dependent

Substance Abuse/ Dependency	High Risk	Medium Risk	Low Risk
Dependent	Residential TX	Intensive outpatient	Intensive Outpatient Employment
Abuser	Criminal Values Therapy as part of Intensive Outpatient	Outpatient with Employment	Outpatient with Employment
None	Criminal thinking/values Employment	Criminal thinking/values Employment	Employment

Fig. 2.1 Illustration of RNR approach with substance use

disorder, and then the focus would be on the disorder. But low-risk offenders with no disorder would not be required to participate in treatment; instead the emphasis will be on other punishments (such as fines) and prosocial behaviors such as employment. This model serves to comingle the provision of adequate care into the equation of reducing the risk of recidivism.

Gladwell's (2000) concept of a "tipping point" suggests that change efforts take hold in an environment only after moving beyond a critical point. Findings from this study show that few offenders can access appropriate services, and with so few services available in the system, the system remains focused on security, enforcement, and punishment. The integration of treatment, including a therapeutic environment that promotes offender change, is barely present. Existing research shows the problems associated with implementing treatment in correctional settings (Taxman & Belenko, 2012; Farabee et al., 1999, Taxman & Bouffard, 2000), and much of these issues are due to the correctional culture that does not recognize its role as a service provider. Treatment programs are considered secondary to the primary mission of the agency, and as a result implementation problems arise from the misalignment of correctional goals.

Revamping the correctional mission is a critical issue given the spiraling incarceration populations and costs and the need to develop a community corrections system that prevents incarceration. Little attention over the last 2 decades has been devoted to the community correctional system. Federal funds have been used for Residential Substance Abuse Treatment Programs (in-prison treatment) and drug treatment courts that serve around 49,000 offenders every year—both make a small dent in the nearly eight million offenders under correctional control. Neither of these are part of an overall strategy to develop a community correctional system that is responsive to the various risk and criminogenic needs of offenders. Most of the solutions on the table—use of evidence-based treatment programs and supervision—do not address the need to expand the full range of programming and services geared to the needs of the offender profiles.

If there is a desire to move towards a more evidence-based approach, then there will be a need to adapt the correctional environment. The implementation of evidence-based practices and the use of appropriate assessment and placement

protocol are keys to the successful expansion of correctional alternatives. Probation and parole supervision exposes the offender to an array of service outlets in the community. However, these agencies are not structured to effectively manage their clientele, as they implement only 4.6 (of 11) evidence-based practices (Friedmann, Taxman, & Henderson, 2007). Drug courts, a widely heralded alternative to traditional criminal justice involvement, implement an average of 5.9 EBPs and only 6.1 of the "10 key components" (Taxman & Perdoni, 2009). And, the use of risk and screening tools across all correctional settings leaves something to be desired (Taxman, Perdoni, & Harrison, 2007). With broader utilization of EBPs, universal adoption of standardized screening and assessment tools, and the implementation of an approach like the RNR model, offenders suited for lower levels of control and who pose the least risk to public safety can be assigned to more efficient and effective types of supervision.

Conclusion

Acting on the ideas presented here can be done fluidly and efficiently, because a common principle underlies everyone: do what works. With the majority of the criminal justice population suffering from various substance abuse, health, and mental health problems, it is clear that the system must assume responsibility for implementing the changes necessary to effectively address offender needs. However, findings from this case study show that less than 10 % of offenders successfully complete treatment programs sufficient to address their needs. Even a modest improvement on current practices would not yield drastic changes given the size of the correctional population and the unmet needs. A strategic approach will better enable correctional agencies to focus on implementation issues associated with better practices, and this includes using the RNR model to guide the types of services available to the offender population. This is what we will demonstrate in other chapters of this book.

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Appendix A: assumptions underlying models 1 and 2

	Model 1	Model 2
Duration assumption (number of times per year service is offered)		
Under 30 days	10	12
31–90 days	5	6.2
91–120 days	3	3.5
121–180 days	2	2.4
181–365 days	1.2	1.3
Over 365 days	0.8	1
Retention rate assumption		
Low-/medium-intensity programming	55 %	
High-intensity programming	65 %	

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