

A Benefit-Cost Analysis of Jail-Based Competency Restoration Services in Travis County, Texas

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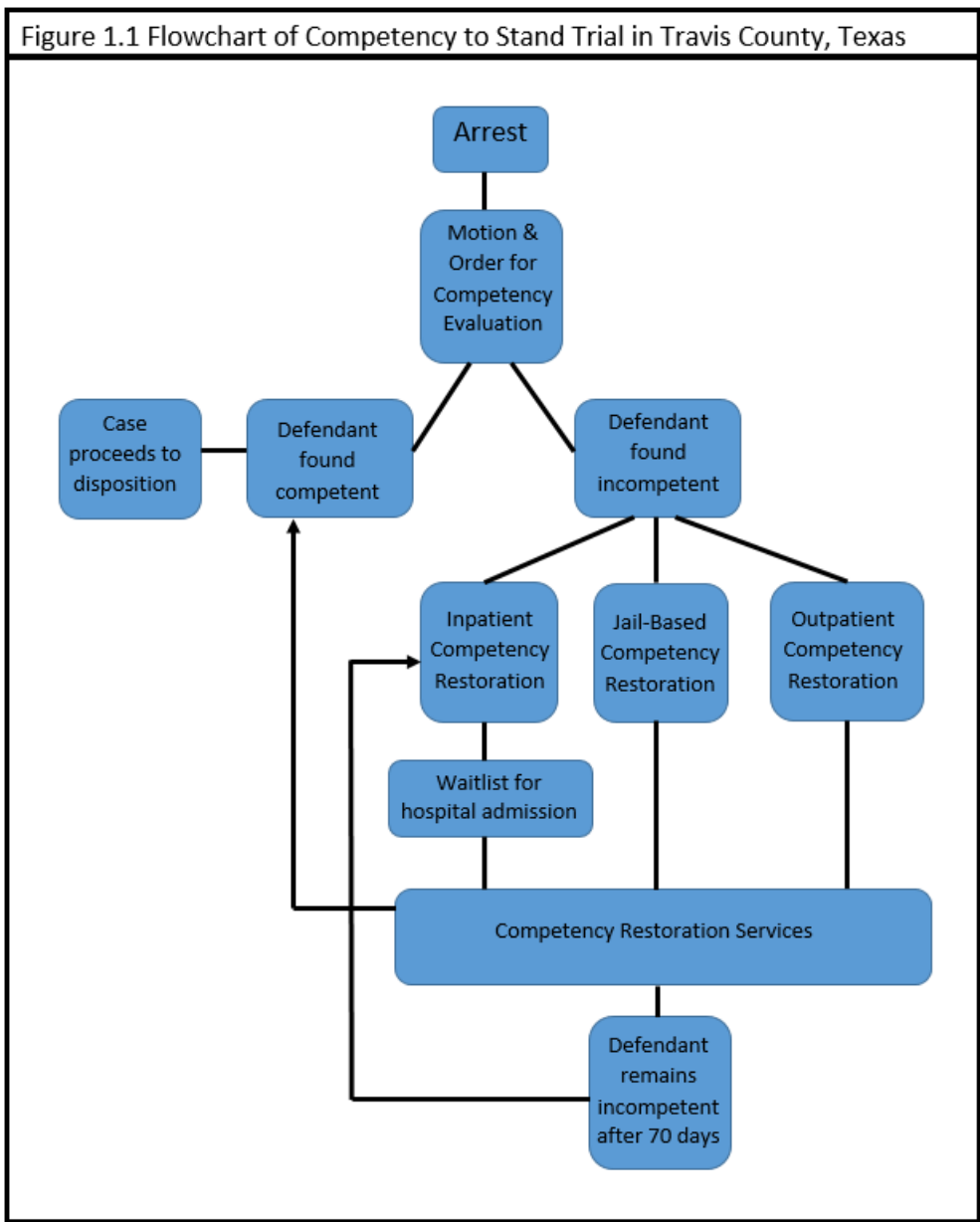
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Chapter One: Introduction

Over the last sixty years, after the shuttering of mental hospitals and insane asylums during the deinstitutionalization of the 1950s, the United States has seen a sharp increase in the number of mentally ill persons arrested and incarcerated in local county jails. Prisons and jails in the US are now the largest provider of mental health treatment in our country. This problem is only exacerbated by frequent budget cuts at the federal, state, and local levels. Reductions in financial resources for mental health treatment within the community have shifted the costs of providing services to local emergency rooms and county jails (Rice, 2014, p. 59). Unfortunately, these institutions are not designed as mental health units (Jennings, 2012, p. 77) and typically lack the environmental attributes conducive to mental health treatment. Sadly, even five years ago, there were already more than three times as many mentally ill persons in jail than in hospitals (Jennings, 2012, p. 75). As recently as 2014, Texas ranked 49th out of the 50 states in mental health funding (Beard, 2014, p. 8).

Once entangled in the criminal justice system, many mentally ill defendants find themselves adjudicated incompetent to stand trial. This judicial finding interrupts the prosecution of a case until the defendant is treated and their competency restored. With the systemic deterioration of public resources for mental health services, these defendants find themselves caught in the logjam of a system that is not designed for their benefit nor contributes to their attempts at regaining competency (Jennings, 2012, p. 75). Incompetent defendants typically receive mental health services in a state hospital setting; however, with the sharp decrease in available services, many defendants find themselves waiting weeks,

sometimes months, for admission to such a facility. The resulting waitlist of incompetent defendants pending transfer to a state hospital creates cost burdens for local jails. These burdens are potentially alleviated by the offering of jail-based competency restoration services. As seen in Figure 1.1, offering jail-based competency restoration services can utilize existing infrastructure to avoid long hospital waitlists by providing services to defendants who do not qualify for bond or outpatient services.



This paper will examine what it means to be adjudicated incompetent to stand trial, what treatment is available for these defendants (and at what cost), and a benefit-cost analysis of offering jail-based competency restoration services within Travis County, Texas.

Purpose Statement

The purpose of this applied research project is threefold. First, this study will include a brief history of the law surrounding competency to stand trial and an overview of the current state of incompetent defendants in the criminal justice system, as well as policy alternatives to help reduce wait times. Secondly, this study will examine the history of benefit-cost analysis and its use in the public sector. Lastly, this project will apply benefit-cost analysis to the proposed project of utilizing jail-based competency restoration services in Travis County, Texas. One analysis will be conducted at the county level and a second analysis will scale this project to the state level.

Budget cuts around the nation have limited mental health services in many jurisdictions. Due to a decrease in services, some mentally ill citizens are not able to access or maintain their requisite level of care. If those same citizens find themselves entangled in the criminal justice system, there is a fair chance they could be deemed incompetent to stand trial. When a criminal defendant is found incompetent to stand trial he or she is legally afforded competency restoration services, most typically offered in state hospitals and outpatient facilities. Budget cuts can also result in decreased service capacity at state mental health hospitals. These factors combine to create the potential for county jails to have a waitlist of incompetent inmates

waiting their turn to be transferred to state hospitals for competency restoration services. This logjam has created financial, legal, and constitutional issues for local jurisdictions within the criminal justice system. Without a drastic change in either state and federal funds, or new policy initiatives, many county jails will be overwhelmed with a backlog of incompetent defendants.

By proposing the services of a jail-based competency restoration program, this project aims to identify the benefits and costs of establishing a new avenue for defendants to regain competency outside of the costly and overfilled state hospital system. The use of benefit-cost analysis can help the decision makers of Travis County determine if implementing this project can help ameliorate some of the financial, legal, and constitutional issues that are rampant in a backlog of incarcerated, incompetent defendants. Additionally, state lawmakers will be able to evaluate whether funding jail-based competency restoration services at the local level saves enough state money to be economically viable.

Chapter Two: Literature Review

Introduction

This chapter reviews the literature surrounding the legal theory of competency to stand trial and the modern issues surrounding incompetent defendants waiting in local jails for their turn at receiving competency restoration services. This chapter aims to provide a foundation for understanding the policy problem in Travis County, Texas and is useful in conducting a benefit-cost analysis for offering jail-based competency restoration services.

Legal theory of competency to stand trial

The legal theory of competency to stand trial originates from the principle that under the United States Constitution, citizens charged with criminal offenses have the right to be mentally present during the legal proceedings against them (Beard, 2014, p. 1). Competency to stand trial applies to the 14th Amendment, which guarantees due process in all criminal proceedings. According to Johnson, “competence to stand trial is a critical gatekeeping function of the judicial and forensic communities and assures that defendants understand courtroom procedures” (2015, p. 228).

In 1960, the United States Supreme Court case *Dusky v. United States* set the legal standard for determining competency to stand trial (Dillard, 2006, p. 1226). This case established a defendant’s right to have their competency evaluated prior to trial (Palermo, 2015, 1503). In this landmark case, Milton Dusky was charged with kidnapping and raping a juvenile female. Dusky was diagnosed with schizophrenia and reported little to no memory of

the events. Despite conflicting psychiatric evaluations of his mental state, Dusky was tried, convicted, and sentenced to 45 years. Dusky's appeal was granted and his case retried, reducing his sentence to 20 years. In the appellate decision, the United States Supreme Court ruled that it is not enough merely to be oriented to time, person, and place; a defendant must have sufficient present ability to consult with his attorney and a rational as well as factual understanding of the proceedings against him (*Dusky v. United States*, 1960). Johnson reiterates that the competency standard "draws on fundamental principles of fairness to establish that it is both unlawful and unethical for defendants to proceed in a criminal matter without an understanding of the proceedings, its consequences, and the ability to assist their attorneys" (2015, p. 229).

How incompetent defendants can strain multiple systems

Incompetency defendants place a strain on both the criminal justice system and the mental health system. After a finding of incompetency, defendants must be restored to competency before their case can proceed through the court system, as a finding of incompetency suspends any additional criminal proceedings (Winick, 1986, p. 243). While any defendant could be found to be incompetent to stand trial, defendants with a mental illness have a much higher incidence of incompetency. According to a meta-analysis of competency to stand trial research, defendants suffering from a psychotic disorder are eight times more likely to be found incompetent to stand trial than a defendant without a mental health diagnosis (Pirelli, Gottdiener, and Zapf, 2011, p. 1).

A finding of incompetency is not a rare occurrence within the criminal justice system. Valerio and Becker (2016) estimate as many as 60,000 competency evaluations are performed every year with a base rate of approximately 27% of the evaluations resulting in a finding of incompetency (p. 61). These incompetent defendants require treatment that is most often provided through a state's mental health system. With a little over a quarter of examined defendants requiring treatment, nearly 4,000 beds in psychiatric hospitals are occupied by defendants hospitalized for restoration to competency (Wortzel, 2007, p. 357). This reduces the availability of services in state hospitals for non-forensic patients and strains the broader state-funded mental health treatment system.

Policy issues regarding competency to stand trial

Historically, the goal of timely competency restoration treatment has been hampered by long wait times and a scarcity of resources in the forensic mental health field. Defendants often remain incarcerated after they are adjudicated incompetent to stand trial while they await being transferred to a state hospital for the purpose of receiving competency restoration services. Additionally, once transferred to an inpatient mental health facility, defendants unlikely to regain competency had historically been held indefinitely in a hospital setting. According to Bertman, "until 1972, there was no statute of limitations on how long a defendant could be held for treatment" (2003, p. 27). This practice was scrutinized by the United States Supreme Court, who ruled in *Jackson v. Indiana* that a "defendant found incompetent to stand trial cannot be held for treatment indefinitely; there must be a prospect for successful treatment within a reasonable period of time" (2003, p. 27). This case law helped shape state statutes that designate how inmates are treated for the purpose of competency restoration,

including how long they can be held to receive such services and how those services are provided.

Of all state hospital admissions, the percentage of forensic admissions nationwide has increased drastically from 7.6% in 1983 to 36% in 2012 (Gowensmith, 2016 p. 295). Forensic commitments are overshadowing other responsibilities of state-run inpatients hospitals, including civil commitments and orders of protective custody. This trend clearly justifies the need for improvements in how states systematically address restoration of competency for defendants with pending criminal charges.

Systemic deficiencies create burdensome waitlists

“The crisis in treatment of persons judged incompetent to proceed to trial is emblematic of an overwhelmed mental health system, representing the downstream logjam resulting from insufficiencies at multiple levels” (Christy, 2010, p. 709). State resources dedicated to mental health treatment have not increased parallel with the growing needs within the criminal justice system. The volume of incompetent defendants relative to the scarcity of hospital beds creates waitlists. As of October 2016, the state clearinghouse waitlist in Texas for inpatient treatment of incompetent defendants had 342 defendants waiting for admission to a state hospital. ¹

Waitlists are long and can move slowly. It is not uncommon for defendants to spend more time confined in jail on the clearinghouse waitlist during the pre-trial phase of their case

¹ Per the Texas Senate Committee on Health and Human Services’ Interim Report to the 85th Legislature, available here: <http://www.senate.texas.gov/cmtes/85/c610/c610.InterimReport2016.pdf>

than incarcerated while awaiting trial (Dillard, 2007, p. 1225). State hospitals have a limited capacity that has not kept pace with forensic commitments (Gowensmith, 2016, p.293). In many jurisdictions, defendants could wait months in jail before being transferred to a hospital for treatment to begin. This is a serious issue that creates extreme consequences for incompetent defendants, and is a major contributing factor for persons with mental illness remaining in the criminal justice system longer than necessary (Lamb, 2005, p. 533). Across the country, hundreds of pre-trial defendants are languishing in jails, unable to access the competency restoration treatment care they require. During this time, they are unable to move their cases forward in the legal process as they sit waiting to be admitted to undersized and understaffed state hospitals (Wortzel, 2007, p. 357). According to Christy (2010, p. 709), multiple issues arise when incompetent defendants' treatment is delayed. First, local county jails are responsible for housing and caring for these defendants until they can be transported to the proper facility for competency restoration. Second, defendants are being housed in jails that may not be the most ideal setting for defendants with mental illness, if not housed in a proper mental health unit within the jail. Lastly, the courts experience delay in moving the criminal cases on their dockets.

Additionally fueling the fire is the issue that defendants are not always admitted to the nearest state hospital due to limited bed availability and specific individual needs (Christy, 2010, p. 714). When these defendants are transported tens, if not hundreds, of miles away from their county jail, they lose the ease of access to a local support system of family, friends, legal counsel, and community mental health services that may have been better able to assist them in competency restoration had they remained in their local jurisdiction.

The imbalance in meeting a defendant's medical, mental, and legal needs within a financially strained system has led some defense attorneys, family members, and civil rights advocates to pursue solutions through litigation. Several counties in Florida saw judges issue court orders for the immediate transfer of defendants; this resulted in some defendants transferring to state hospitals ahead of defendants that may have waited much longer (Christy, 2010, p. 708).

The financial impact of waitlists on local jurisdictions

The waitlist of mentally ill defendants sitting in jail awaiting transfer to a state hospital costs local jurisdictions much more than the general population of inmates for a variety of reasons. First, their period of incarceration is longer than the typical inmate. Second, mentally ill inmates need psychotropic medication and extra staffing (Torrey, 2016, p. 9). This population requires much more supervision and intervention than the general population of inmates (Jennings, 2012, p.76). For example, some mentally ill inmates can require protective housing in jail cells separate from the general population of inmates. These cells need to be staffed at a higher ratio than other cells, thereby increasing the need for jail staff. Additionally, this staff needs to be trained to manage a population of inmates whose mental illness can cause them to be vulnerable to suicide, violence, and trauma. Third, having mentally ill inmates filling up local jails without progressing through the criminal justice system can result in an increase in the number of lawsuits filed against local jails (Torrey, 2010, p. 10).

The high costs of medication and treatment for mentally ill inmates can be seen in Torrey's (2010) analysis of increased jail spending that showed over 17% of inmates in the

Harris County (Houston, Texas) jail were on psychotropic medications. This population accounted for in an increase in mental health care spending in the jail to \$24 million annually as of 2008. When coupled with the incarceration costs during their time on the waitlist, housing these inmates was costing the jail \$87 million annually (p. 6).

Proposed jail-based competency restoration services

The rising costs of incarcerating mentally ill defendants while they await transfer to a state hospital treatment facility has come to the attention of lawmakers around the country. In an effort to lower costs and increase efficiency in restoring these defendants to competency, the Texas Legislature in 2013 passed a bill allowing the Department of State Health Services to approve contracts between local jails and community mental health providers to provide jail-based competency restoration services (Beard, 2014, p. 3). These services include group classes aimed toward instructing defendants how the criminal justice system works, defining basic legal terms, and navigating potential criminal sentences.

Officials found that the average cost of restoring a defendant to competency in a state hospital is \$421 per day, but the average cost of treating a defendant in an outpatient setting was only \$106 per day (Beard, 2014, p. 5). With such a dramatic difference in cost, innovative programs like jail-based treatment can provide forensic mental health treatment at a reduced cost without sacrificing the effectiveness, timeliness, or quality of treatment (Rice, 2014, p. 67).

By offering competency restoration services in local jails, counties can help to reduce or eliminate their waitlist of defendants waiting admission to a state hospital. These programs could accelerate treatment delivery and cut the need for costly forensic state hospital beds. Inmates can also stay within their local jurisdictions without having to be transported to state

hospitals, thereby giving them increased access to local attorneys, family members, and additional service providers (Rice, 2014, p. 60). A jail-based competency restoration treatment program was initiated in Virginia in 2012. At the time, the cost of a treatment bed in the state's maximum security state hospital averaged \$776 per day. A bed in the local jail cost an average of \$70 a day. This dramatic reduction of costs could cover the expense of the jail-based treatment while still netting a cost savings to local jails (Jennings, 2012, p. 77).

Wortzel (2007) has identified three reasons why including these services in pre-trial incarceration is beneficial. First, fewer inmates would experience exacerbations of mental illness that can lead to findings of incompetency. Second, those who are found to be incompetent to stand trial can be restored to competency in the jail and avoid hospital admissions. Finally, those requiring more intensive hospital-based treatment could be admitted much faster due to decreased wait times (p. 360).

Jail-based competency restoration services would be most cost effective for defendants that are easily restored to competency. A majority of defendants can be restored within a six month time frame (Zapf, 2011, p. 44). A program in Arizona has shown to be successful in reducing both timeframes and costs associated with competency restoration (Valerio, 2016, p. 61). Another such program in California concluded that, with initiating treatment much sooner, restoration was achieved more quickly and saved an average of \$70,000 for each inmate that didn't require hospital admission (Rice, 2014, p. 65).

In addition to cost savings at the local level, state budgets should feel some relief if forensic commitments to state hospitals can be reduced, either in number of commitments or in duration of stay. Jail-based competency restoration services can potentially increase inmate

mental health treatment, reduce local costs, and ease burdens on a strained mental health system.

As far back as 1995, McFarland wrote about the “era of managed mental health care;” society was experiencing mental health services becoming more subsidized by the public (p. 27). Care was provided by local governments in jails and state hospitals more than in private healthcare facilities. This trend has continued, and our communities are now faced with the need to streamline these services in an effort to provide the most efficient use of public resources. As of 2016, nine states offered jail-based competency restoration programs in select county jails (Arizona, California, Colorado, Florida, Georgia, Louisiana, Tennessee, Texas, and Virginia). As a result of these programs, many incompetent defendants were restored to competency and their cases able to proceed through the criminal justice system without hospital-level care for restoration. Jail-based competency restoration programs also serve as a screening program for defendants that may be eligible for outpatient competency restoration programs (Gowensmith, 2016, p. 298). It is possible that jail-based services could stabilize a person’s mental health issues enough that they would qualify for outpatient services, reducing the waitlist for inpatient hospitalization.

Chapter Summary

In summary, this chapter has discussed the legal theory of competency to stand trial, the history of the policy problem, including systematic deficiencies in treating incompetent defendants, and has introduced the possibility of jail-based competency restoration as a method of ameliorating the local issues surrounding incompetent defendants in Travis County,

Texas. Going forward, this paper examines the methodology of benefit-cost analysis as a way to assess jail-based competency restoration services in Travis County, Texas. The benefits and costs associated with this analysis are identified in the conceptual framework in the following chapter.

Chapter Three: Benefit-Cost Analysis: A Conceptual Framework²

Introduction

Benefit-cost analysis is an economic decision making tool that is widely used in both the private and public sectors (Shields and Rangarajan, 2013, p. 26). With the limited resources of local government, benefit-cost analysis can be helpful in providing valuable information to elected officials that can be used in determining which projects can provide the greatest social benefit at an accepted cost. Benefit-cost analysis is a tool decision makers can use to make plans for future projects as well as analyze existing programs. This chapter discusses what a benefit-cost analysis is and the steps necessary to conduct an analysis for a project. This chapter also develops the specific benefit-cost frameworks for Travis County and the state of Texas.

Benefit-cost analysis as a tool to assess policy alternatives

Local and state governments are tasked with balancing the duty to provide needed public services with the responsibility of using scarce public resources in the most efficient and fiscally prudent manner. When policy options are being considered, benefit-cost analysis can be a useful tool for helping decision-makers determine the value of specific projects and programs under consideration. As we all know, “financial resources are scarce in the public sector and therefore an organization needs to seek out the best return on their investment,” (Ascott, 2006, page 7). To do this, benefit-cost analysis creates a standardized, analytic

² This applied research project uses net benefits as the decision criteria, therefore the emphasis has been placed on benefits. In the literature, cost-benefit analysis and benefit-cost analysis are used interchangeably.

framework that can be applied to alternative policy scenarios, creating a financial yardstick that can help gauge multiple projects using the same measurement.

When applied to public sector policy decisions in the criminal justice and behavioral health policy areas, benefit-cost analysis applies economic theory to "expenditure decisions that require detailed information about the merits of alternative treatment programs, modalities, behavioral therapies, and pharmaco-therapies," (Cartwright, 2000, p. 11). There are many areas in public policy that hinge on the intersection of specialized knowledge and nuanced laws and regulations; criminal justice and mental health are no exceptions. Sadly, these areas often lack professional analyses that can help decision-makers create policy. "Despite the widespread use of economic techniques in other policy domains, economic evaluation tools have not been staples of the criminal justice policy analyst's tool kit" (Marsh, 2008, p. 118). Benefit-cost analysis can be applied equally to complex programming alternatives, thereby creating an evaluation tool that can be understood by elected officials and decision-makers despite any lack of specialized knowledge.

What is benefit-cost analysis?

According to Galambos and Schreiber (1978), there are four steps to a benefit-cost analysis. The initial step requires identifying the benefits and costs of a project. This includes both upfront costs, future costs, and all measurable current and future benefits. Next, the project manager must determine how to measure these costs and benefits in dollars. Converting benefits and costs into dollars is necessary for a benefit-cost analysis as all variables in the equation need to be measured in the same unit. The third step is incorporating a time dimension and discount rate. This allows future benefits and costs to be measured in present-

day dollar amounts. Finally, the last step is to use the resulting data analysis to reach a policy decision (p. 62).

Meaning of costs

Project costs consist of the value of the goods and services consumed in the implementation and maintenance of a project (Davisson, 1964, p. 153). Costs can be thought of as the resources used by a project; they are measured by the value of society's resources that are withdrawn from the community as a result of a program (Wolff, 1997, p. 736). There are two primary types of costs: fixed costs and costs that accrue over time. Fixed costs accrue early and are typically associated with the initial phase of setting up a project. These include infrastructure like building costs, necessary equipment, etc. Costs that accrue over time are the costs associated with maintaining a project. These costs include salaries, training, recurring supply orders, etc.

In behavioral health cases, costs should include all intervention materials, programming, and educational materials used by a program (Singh, 2001, p. 114). Total costs incorporate up-front expenses of new facilities as well as labor, maintenance, building costs, insurance, and intangibles.

Meaning of benefits

Project benefits are the value created as a result of the measure, policy, or project to which costs are associated (Davisson, 1964, p. 154). The benefits of any given project should produce enough benefit to society that policymakers can justify spending limited fund (Ascott, 2006, p. 11). Benefits can come in many forms: reduction of costs, increased productivity, or

additional public services. Benefits can also be gains in efficiency and resources saved (Singh, 2001, p. 105).

Benefits can be immediate and can also accrue over time. The benefit-cost analysis of offering jail-based competency restoration services will measure benefits that accrue over the course of one calendar year. In order for an analysis to compare apples to apples, each benefit should be measured in a standardized unit, such as dollars. Some social benefits can be hard to monetize, such as improvements in an inmate's mental health.

Time dimension

Because there is a difference in the value of future dollars compared to present dollars, the third dimension of a benefit-cost analysis is the time dimension. In other words, analysts need to account for time over the life of a project and calculate future costs in present-value terms (Marsh, 2008, p. 121). Many benefit-cost analyses deal with capital projects – projects that include the acquiring, building, and maintenance of tangible property such as buildings, roads, and other infrastructure. The time dimension of any benefit-cost analysis is crucial for projects with large capital investments as their projected lifetime often spans decades.

The time dimension is taken into account using a discount rate. When the discount rate is applied to costs and benefits, you can include future amounts in present value terms.

Oftentimes in public projects, the discount rate is chosen for local governments by their elected officials (Galambos, 1978, p. 74). While the time period taken into account can be somewhat arbitrary, as it is difficult to estimate with accuracy how long capital projects or programming will continue, it is still important to include the time dimension in performing a benefit-cost

analysis (Galambos, 1978, p. 67). Failure to apply a discount rate to future benefits could result in projected benefits being overrated (Davisson, 1964, p. 154).

Reaching a policy decision

After costs and benefits are identified and measured, and a time dimension is established with an appropriate discount rate, the final step in any benefit-cost analysis is reaching a decision. In order to reach a decision, analysts can use different models in their benefit-cost analysis. Galambos and Schreiber describe their take, “benefit-cost analysis is concerned with whether a project is socially profitable...the concern in benefit-cost analysis is whether the social benefits outweigh the social costs – not whether the distribution of costs and benefits among communities (or members of a single community) is considered to be fair or equitable” (1978, p. 73). In other words, this determination is made based off the calculation of net program benefits minus net program costs. If benefits minus costs equals more than zero, the project is cost-beneficial. (Galambos, 1978).

Net Present Value (NPV) is used to determine whether the benefits exceed the costs. Net Present Value focuses on the simple requirement that, to be cost-beneficial, a project’s benefits should exceed the costs. (Ascott, 2006, p. 21). This formula is simply stated as:

$$NPV = PVB - PVC$$

NPV = Net Present Value
PVB = present value of the sum of the benefits
PVC = present value of the sum of the costs

The present value of the benefits is a sum of all benefits of the project calculated in present value (using an appropriate discount rate when a time dimension is involved). The present value of the costs is the aggregate costs associated with the project. If net present value is positive, then the project is cost-beneficial (Ascott, 2006, 22-23).

Strengths and weaknesses of benefit-cost analysis

Benefit-cost analysis, while a strong economic tool for making policy decisions, is not without faults. Benefit-cost analysis, despite conceptual and empirical advances over time, continues to be a fusion of science and art (Weisbrod, 1983, p. 808). Analysts need to strive to capture data that are both subjective and qualitative and use it in the most objective way possible. Benefit-cost analysis is not purely objective; analysis relies on subjective inputs and estimated outputs and, therefore, cannot guarantee that results are without error nor the best use of government resources (Galambos, 1978, p. 70). Because of this potentially biased aspect of inputs and outputs, directors and elected officials responsible for making policy decisions should be made aware that the analysis is not without fault and may contain subjective elements. In his 1983 article, Weisbrod summarizes a weakness of benefit-cost analysis aptly when he states, “the use of benefit-cost analysis in public decision-making has been criticized for reducing policy decisions to comparisons of dollar quantities by omitting effects not easily expressed in monetary terms or for which the assignment of monetary values can be made only arbitrarily” (p. 809). This criticism can be especially true when dealing with both mental health and criminal justice issues as these two policy realms can deal with individual health and freedoms.

Benefit-cost analysis applied to jail-based competency restoration in Travis County, Texas

Jennings (2012, p. 76) found that offering jail-based competency restoration services could create the benefit of significantly accelerated treatment for incompetent defendants, thereby reducing demand for expensive forensic beds at state hospitals as well as helping local jurisdictions manage a high-risk inmate population, both of which could provide cost savings to local communities and improved services for incompetent defendants.

Aside from the measurable costs and benefits of providing competency restoration services in local jails, there is a potential benefit that could exist, yet would be hard to estimate for a pre-program analysis. It has been hypothesized that if an inmate was treated in a jail setting he may be more motivated to demonstrate his competence than had he been treated in a hospital setting. According to Kapoor (2011), “mental health lore in both correctional facilities and forensic hospitals is replete with tales of defendants who feigned incompetence so that they could hide out in the hospital. Jail-based restoration would eliminate the possibility of a transfer to a hospital, thereby making restoration to competence the only path toward release from confinement, perhaps leading to a decrease in malingered incompetence over time. At best, this benefit would be small...but it is nonetheless worth considering” (page 314).

Designing the Conceptual Framework

While the formula for New Present Value is the same for every benefit-cost analysis, the individual benefits and costs that make up a project are quite different. The identification of these benefits and costs (step 1) and the measuring of the benefits and costs (step 2) form the framework for individual studies. Using a framework can help in developing research design, measuring variables in the date, and determining how to accomplish analysis and interpretation (Shields and Whetsell, 2017). Per Shields and Whetsell (2017), “In practice, the costs and benefits can be identified in a conceptual framework table and then the dollar value of each monetized in an operationalization table.” The next section determines the benefits and costs associated with proposed jail-based competency restoration services in Travis County, Texas. These are organized in the conceptual framework presented in Table 3.1.

Table 3.1 Conceptual Framework – County Level	
BENEFITS	SCHOLARLY SUPPORT
Reduction in days that inmates remains incarcerated waiting to be restored to competency	Beard (2014), Christy (2010), Dillard (2006), Jennings (2012), Johnson (2015), Kapoor (2011), Rice (2014), Winick (1986)
Reduction in travel costs for Sheriff’s Office to transport inmates to state hospitals	Christy (2010), Galambos (1978)
Reduction in days that inmates remain incarcerated waiting for forensic examinations	Christy (2010), Jennings (2012), Rice (2014)
Reduction in cost of forensic competency examinations	Christy (2010), Lamb (2005), Rice (2014), Winick (1986)
COSTS	
Competency Restoration Curriculum and materials (including workbooks and supplies)	Cartwright (2000), Mueller (2007), Rice (2014), Winick (1986)
Competency Restoration Program staff salaries (contracted psychiatrist and social workers)	Johnson (2015), Kapoor (2011), Rice (2014)
Increased Jail staff salaries (safety monitoring for restoration group meetings)	Jennings (2012), Weisbrod (1983)
Housing costs for inmates in program	Beard (2014), Christy (2010), Dillard (2006), Jennings (2012), Johnson (2015), Kapoor (2011), Rice (2014), Winick (1986)

Identification of the benefits

Benefit 1 - Reduction in days inmates wait to be restored to competency while incarcerated

As recently as 2013, the average time an inmate remained on the clearinghouse waitlist before a forensic bed was available was 41 days. This represents a cost of incarcerating an inmate for 41 days while they are neither furthering their criminal case nor receiving competency restoration services. In reality, those 41 days are wasted (Legislative Budget Board, 2013, p. 216). If incompetency could be addressed in a jail setting, without the need for transfer to a state hospital, the days spent on the clearinghouse waitlist would potentially be eliminated. This creates a cost savings, which is a direct benefit to the local jurisdiction. The reduction of days spent in limbo, multiplied by the cost of incarcerating a mentally ill defendant, is a substantial savings.

Benefit 2 - Reduction in travel costs for transporting inmates to state hospitals

Historically, incompetent defendants have been admitted to inpatient state hospitals to receive competency restoration services. When incarcerated, it is the task of the local sheriff to transport the inmate to the state hospital. With only 10 such facilities in the state of Texas, it is not feasible that every jurisdiction has a local hospital. Additionally, not all state hospitals can accommodate all patients' needs. Therefore, not all defendants are admitted to the nearest state hospital; bed availability and client needs can dictate where a defendant is admitted (Christy, 2010 p. 714). Jail-based competency restoration services could reduce the number of trips the sheriff needs to make, thereby cutting travel costs.

In addition to a reduction in travel expenses, fewer trips to state hospitals will also create a savings in maintenance costs for county vehicles (Galambos, 1978, p. 64). Fewer trips

means potentially fewer repairs, and less wear on the cars and vans used to make the trip to and from a hospital. Because county vehicles have multiples uses, not just transporting defendants to state hospitals, the maintenance costs associated with these trips are unable to be separated from the entirety of maintenance costs these vehicles incur.

Benefit 3 – Reduction in days inmates wait for forensic exams

In Travis County, competency examinations are contracted through an approved list of forensic psychiatrists and psychologists. These professionals typically maintain private practices and conduct forensic examinations as ordered by the courts. In the densely populated area of Central Texas, a majority of the forensic examiners serve multiple jurisdictions. This often results in a delay between the order for the examination and the time the doctor is able to see the defendant, sometimes up to three weeks.

Jail-based competency restoration services include contracted staff that work onsite. With a psychiatrist working in the jail on a daily basis, forensic evaluations can take place in a timely manner. The reduction in days between an order for competency evaluation and the evaluation taking place is a benefit because it shortens the overall competency process, thereby reducing the days a defendant is incarcerated. The days between an order for evaluation and the examiner’s report to the court are not fruitful days in the prosecution or progression of a criminal case and therefore represent a cost that can be reduced.

Benefit 4 – Reduction in cost of forensic exams

Program staff includes a psychiatrist and a psychologist. Both of these employees are qualified to conduct competency evaluations. By having these staff onsite in the jail on a full

time basis, it is possible to conduct competency evaluations as needed for program participants. Without such a program in place, defendants have to wait for a contracted examiner to visit the jail to conduct the examination. Competency examinations by contracted professionals are billed to the county at an hourly rate, typically ranging \$450 - \$550. Once in the program, an inmate will require a minimum of one competency evaluation in order to be adjudicated competent by the court. This cost, multiplied by the number of participants in the program in one year, represents a cost savings to Travis County.

Additional benefit of cost savings at the state level

The conceptual framework in Table 3.1 represents the variables in conducting a benefit-cost analysis at the county level. This analysis can help local officials determine if jail-based competency restoration services are cost-beneficial to Travis County. This analysis is an important tool for determining if local leaders should spend scarce resources on a new program. Because benefit-cost analysis is also concerned with social benefits, this analysis can be conducted at the state level to determine if there are ways to benefit citizens on a broader scale. By figuring in the additional benefit of reduced state spending, benefit-cost analysis can tell us if jail-based competency restoration services have any utility in saving the state resources. Table 3.2 includes an additional benefit of saving state monies by reducing the number of defendants that would require the state to fund competency restoration services in an inpatient state hospital setting. This additional benefit is highlighted in blue on the table. All other variables in Table 3.2 remain the same as in Table 3.1.

Table 3.2 Conceptual Framework – State Level	
BENEFITS	SCHOLARLY SUPPORT
Reduction in days that inmates remains incarcerated waiting to be restored to competency	Beard (2014), Christy (2010), Dillard (2006), Jennings (2012), Johnson (2015), Kapoor (2011), Rice (2014), Winick (1986)
Reduction in travel costs for Sheriff's Office to transport inmates to state hospitals	Christy (2010), Galambos (1978)
Reduction in days that inmates remain incarcerated waiting for forensic examinations	Christy (2010), Jennings (2012), Rice (2014)
Reduction in cost of forensic competency examinations	Christy (2010), Lamb (2005), Rice (2014), Winick (1986)
Reduction in state hospital forensic bed days	Beard (2014), Christy (2010), Rice (2014)
COSTS	
Competency Restoration Curriculum and materials (including workbooks and supplies)	Cartwright (2000), Mueller (2007), Rice (2014), Winick (1986)
Competency Restoration Program staff salaries (contracted psychiatrist and social workers)	Johnson (2015), Kapoor (2011), Rice (2014)
Increased Jail staff salaries (safety monitoring for restoration group meetings)	Jennings (2012), Weisbrod (1983)
Housing costs for inmates in program	Beard (2014), Christy (2010), Dillard (2006), Jennings (2012), Johnson (2015), Kapoor (2011), Rice (2014), Winick (1986)

Benefit 5 – Reduction in forensic state hospital bed days

In 2016, the Texas Department of State Health Services³ ran the 10 inpatient mental health hospitals within the state. Currently, a majority of defendants adjudicated incompetent to stand trial are being treated within this state hospital system. The cost of treatment per day is higher in the state hospital system than in local county jails. If defendants can be restored to competency while incarcerated in local jails and avoid admission to the state hospital system, the state could see a cost savings. This reduction in costs is equal to the number of days

³ On September 1, 2017, responsibility for the state hospital system transferred to the Health and Human Services Commission.

inmates stay in the county jail rather than being admitted to a state hospital, multiplied by the cost of treating an incompetent defendant in a forensic hospital bed per day.

Identification of the costs

Cost 1 – Competency restoration curriculum and supplies

Jail-based competency restoration services are contracted through certified providers that are responsible for providing needed curriculum and supplies. According to the proposed rules in the *Texas Register*, the “provider shall use a DSHS-approved training module to provide legal education for each participant” (June 26, 2015). This curriculum includes educational counseling aimed toward helping defendants understand the legal process, the charges brought against them, possible case dispositions, and their rights in a criminal proceeding (2013, p. 218). This curriculum should be paired with psychiatric medications (Mueller, 2007, p. 892), case management and rehabilitative services that include substance abuse treatment and counseling.

Cost 2 – Competency restoration program staff salaries

Jail-based competency restoration services are centered on contracting new staff to come into the jail and provide services to defendants adjudicated incompetent to stand trial. These staff, including a psychiatrist, nurses, and mental health professionals, represent a cost to the county because their salaries are paid for using taxpayers’ dollars. McFarland estimates that labor and staff costs can account for up to eighty percent of the entire cost of providing mental health services (1995, p. 28). Labor costs can account for such a larger percentage of jail-based competency restoration services because much of the curriculum is focused on interacting with

the inmates and talking about courtroom procedures and etiquette. There is not a high cost for textbooks or testing supplies that one may normally associate with the idea of curriculum costs. Rather, these services are provided by contracted employees interacting directly with inmates.

Program staff are required to be onsite at the jail 24 hours a day, seven days a week. Staff will be run by a program coordinator required to be a licensed practitioner of the healing arts (LPHA) and shall oversee a multidisciplinary treatment team. Each team is required to employ a psychiatrist, a registered nurse, and a psychologist, in addition to other mental health professionals. Staffing needs will hinge on the number of defendants admitted into the programming, as rules require a minimum staff to inmate ratio of 1:3.7. [(40 *TexReg* 4197) June 26, 2016.]

Cost 3 – Increased jail staff salaries

Because mentally ill inmates have needs that the general population of inmates don't, they require more supervision and oversight while in jail. Even without the implementation of jail-based competency restoration programming, this population costs more to incarcerate than non-mentally ill inmates, primarily due to increased jail staffing needs (Torrey, 2010, p. 9). Local jails are already staffed to accommodate the needs of their mentally ill inmates. However, the introduction of new programming within the jail setting will increase staffing needs. If incompetent inmates are pulled from their housing assignments and congregate in a new area of the jail to receive competency restoration services, this creates a new area that will need supervision and oversight by jail staffers. The proposed rules set forth in the *Texas Register* require that the mental health unit housing the jail-based competency restoration programming

be staffed by two specifically trained jail security staff at all times. [(40 *TexReg* 4197) June 26, 2016.] The salaries and employment costs associated with this increase in jail staff is a cost associated with implementing jail-based competency restoration services in the Travis County jail.

Cost 4 – Housing mentally ill inmates in the program

While incompetent defendants are receiving jail-based competency restoration services, they will be housed in the local jail instead of being admitted to a state hospital. This period of treatment will represent a cost to the jail. This is a new cost to the jail, since historically incompetent defendants received their treatment in state hospitals.

Time Dimension and Discount Rate

The time dimension and discount rate applied to a benefit-cost analysis can greatly affect the present value of future benefits and costs. Because of this impact, selecting the appropriate time dimension and discount rate is paramount to a reliable analysis when benefits accrue over time and costs are spread over multiple years. Understanding the scope of the benefits and costs in a project is necessary when determining the time dimension of the analysis. Additionally, local governments, public policies, and situational factors can all contribute to the decision of which applicable discount rate to apply to a project.

The proposed jail-based competency restoration services in Travis County, Texas will utilize existing facilities in the local jail. Because of this, there is no need to determine returns to a fixed investment. All of the costs associated with the project are variable costs or are associated

with running the program. Therefore, there is no need to establish a discount rate for the analysis. The time dimension for the analysis will be one calendar year, utilizing data from 2016.

Chapter Summary

This chapter has reviewed what a benefit-cost analysis is, and the steps taken in conducting the analysis. We discussed what benefits and costs are, as well as defined the time dimension and discount rate necessary for most benefit-cost analyses. This chapter introduced the Conceptual Framework that outlines the benefits and costs for proposed jail-based competency restoration services in Travis County.

Chapter Four: Methodology

Introduction

This chapter will describe and explain the methodology used to operationalize the benefits and costs identified in the conceptual framework. This chapter will identify each benefit and each cost and explain how they are measured in dollars. The analysis of these benefits and costs will help determine if jail-based competency restoration services are a cost-beneficial project for Travis County, Texas.

Data for this analysis are provided by multiple entities in Travis County, Texas, including the Travis County Sheriff's Office, which runs the county jail; the Travis County District Clerk's Office, which compiles the public record of felony cases; the Travis County Clerk's Office, which compiles the public record of misdemeanor cases; the Travis County Auditor's Office, which is responsible for monitoring payments made to Travis County vendors; and Integral Care, the county's local mental health authority, which runs the Community Competency Restoration Program. Data sources from outside Travis County, Texas include the Texas Comptroller of Public Accounts, which acts as the state's chief tax collector and accountant; and the Texas Health and Human Services Commission's report on the Harris County Jail Diversion Pilot Program, which monitors spending on mental healthcare related expenses in the Harris County jail. This project is utilizing data from 2016 to look at one full year of competency commitments from the Travis County Correctional Complex.⁴

⁴ Data was aggregated and supplied without PII, the federal standard of personal identifying information, including date of birth and social security numbers. Compiling data without personal identifying information negated the need for an application to the Internal Review Board for using data regarding human subjects.

Table 4.1 shows the operationalization of the conceptual framework at the county level. This table lists the costs and benefits associated with this analysis and describes how they will be measured in dollars. Referencing this table can serve as a guide for this chapter.

Table 4.1 Operationalization Table – County level		
Variables	Unit of Measurement	Source
Benefits		
Reduction in wait list days	Average wait time in jail from the clearinghouse waitlist multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of defendants	Travis County Sheriff's Office
Reduction in travel costs	Transportation costs to and from state hospitals over a fiscal year Mileage costs + employee overtime	Travis County Sheriff's Office
Reduction in wait for forensic exams	Average days between order for exam and completed exam multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of defendants	Travis County Sheriff's Office
Reduction in cost of forensic exams	Contracted cost per competency evaluation multiplied by the number of defendants in the program	County Auditor's Office
Costs		
Program curriculum and materials	Cost for DSHS-approved ROC curriculum and training	Integral Care's CCRP Program budget
Program staffing	Annual salary and benefits for program staff multiplied by the number of staff	Integral Care's CCRP Program budget
Increased jail staffing	Annual salary and benefits for increase in jail guard staffing multiplied by the number of staff	Travis County Sheriff's Office
Housing costs for inmates in program	Average treatment time multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of eligible defendants	Travis County Sheriff's Office

Benefits

Reduction in waitlist days

The primary benefit of offering jail-based competency restoration services is a reduction in the number of days an incompetent defendant is being incarcerated while awaiting transfer to

a state hospital. Rather than waiting for admission to a state hospital before beginning services, the inmate can begin restoration services immediately in the jail. This data is supplied from the Travis County Sheriff's Office. Data is collected for each jail booking in which the defendant requires competency restoration. This analysis includes all competency commitments for the time frame of January 1, 2016 through December 31, 2016.

Data were provided by Travis County Sherriff's Office in the form of an Excel spreadsheet. This spreadsheet tracks the date the defendant is found incompetent to stand trial and the date the defendant is transported to a state hospital. The number of days between those two dates are calculated for each booking. Those days are then summed for all the bookings in 2016 that required a competency commitment. That number is then multiplied by the average cost of incarcerating a mentally-ill inmate. The resulting number is the estimated cost savings of a reduction in waitlist days.

Reduction in travel costs

Data regarding travel costs are supplied from the Travis County Sheriff's Office. This benefit is a reduction of costs that the Travis County Sheriff's Office will spend in transporting incompetent inmates to and from state hospitals across Texas. The Travis County Sheriff's Office records the number of man hours required for each trip. This number is multiplied by the baseline salary of a transportation officer employed by the department.

Travel costs also include mileage and gas costs for each trip. This cost is measured by the distance in miles between the Travis County Correctional Complex, where inmates are housed in Del Valle, Texas, and the different state hospitals. Distance between the jail and the various state hospitals was determined using Google maps. When multiple routes were supplied by Google

maps, the shortest route was chosen. That distance is then multiplied by 2 to account for the round trip. Each trip that the Travis County Sheriff's Office made in 2016 is recorded in an Excel spreadsheet. Those data include trips taking an inmate from jail to a state hospital, as well as trips to a state hospital to pick up an inmate that is returning to jail. If multiple inmates were transported on the same day, mileage for subsequent inmates was entered as 0. This allows for their commitment information to remain on the spreadsheet but for the mileage of their trip not to be counted multiple times. The distance for all trips in 2016 is summed. That distance is then multiplied by the Travis County Sheriff Office's mileage reimbursement rate to calculate the total mileage cost for each trip.

Reduction in wait for forensic exams

Inmates are typically examined for competency at the request of their defense counsel. Competency evaluations are typically conducted by community psychiatrists and psychologists that are contracted by the county. Because these doctors operate private practices and generally do not conduct competency evaluations full time, it can take up to thirty days for exams to be scheduled and completed. Having a psychiatrist or psychologist in the jail that can conduct these evaluations could eliminate a large amount of lag time between the order for evaluation and the evaluation being conducted.

This potential reduction in costs is calculated by counting the number of days between a competency evaluation being ordered and a competency evaluation being completed. Each booking into the jail in 2016 that included a competency commitment was included in this calculation. Those days were summed, and then multiplied by the cost of incarcerating a mentally ill inmate. This total value represents the cost to the county that could be saved if competency evaluations could be conducted in the jail.

Reduction in costs of forensic exams

Currently in Travis County, the county auditor pays the costs for competency evaluations performed by contracted psychiatrists and psychologists. If the Travis County jail employed a psychiatrist or psychologist that could perform these evaluations in the jail, the county would not have to pay for as many competency evaluations completed by contracted doctors. The cost of these evaluations could be absorbed by the salary of the employed doctor in the jail that performed evaluations as part of their job duties.

Cost information regarding competency evaluations is maintained by the county auditor. Currently, Travis County pays an average of \$480 per hour for a competency evaluation conducted by a contracted examiner. This program benefit is calculated using the current rate that Travis County pays to contacted psychiatrists for a competency evaluation multiplied by number of hours that an examiner spends on an evaluation. Typical time frames for examinations are 1.5 hours for misdemeanor evaluations and 4 hours for felony evaluations. To calculate this benefit, the eligible defendants would need to be categorized by either misdemeanants or felons⁵, and the time spent on their evaluations multiplied by the hourly rate charged by a psychiatrist.

Additional benefit of cost savings at the state level

Because the state pays for competency restoration services provided within the state hospital system, there is a cost-savings at the state level when defendants can be restored to competency outside of the state hospital system. This cost savings, when added into the analysis, can shed light on how jail-based competency restoration at the county level can provide a larger

⁵ It is not uncommon for defendants to be charged with multiple offenses after a single arrest. Defendants are categorized by the highest level offense they are charged with per arrest.

benefit to the state. This new benefit has been added into the analysis and can be seen in Table 4.2.

Table 4.2 Operationalization Table – State level		
Variables	Unit of Measurement	Source
Benefits		
Reduction in wait list days	Average wait time in jail from the clearinghouse waitlist multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of defendants	Travis County Sheriff's Office
Reduction in travel costs	Transportation costs to and from state hospitals over a fiscal year Mileage costs + employee overtime	Travis County Sheriff's Office
Reduction in wait for forensic exams	Average days between order for exam and completed exam multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of defendants	Travis County Sheriff's Office
Reduction in cost of forensic exams	Contracted cost per competency evaluation multiplied by the number of defendants in the program	County Auditor's Office
Reduction in forensic state hospital bed days	Days participants spent in Jail-Based Competency Restoration program multiplied by the cost of a forensic hospital bed day	Texas Department of State Health Services
Costs		
Program curriculum and materials	Cost for DSHS-approved ROC curriculum and training	Integral Care's CCRP Program budget
Program staffing	Annual salary and benefits for program staff multiplied by the number of staff	Integral Care's CCRP Program budget
Increased jail staffing	Annual salary and benefits for increase in jail guard staffing multiplied by the number of staff	Travis County Sheriff's Office
Housing costs for inmates in program	Average treatment time multiplied by the cost of incarcerating a mentally ill defendant multiplied by the number of eligible defendants	Travis County Sheriff's Office

Reduction in forensic state hospital bed days

Competency restoration services provided in an inpatient state mental hospital are a cost incurred by the state. The average cost in 2016 of a forensic state hospital bed per day is

\$425.41.⁶ Defendants that can be treated and restored to competency to stand trial in a jail setting do not need to be admitted to a state hospital for competency restoration treatment. Because of the difference in cost between state hospital treatment and jail-based treatment, there is benefit to the state when defendants can be treated at the county level. This cost savings can be calculated by multiplying the average daily cost of a forensic state hospital bed day by the number of days defendants are treated in a jail-based setting. The number of days defendants are treated in a jail-based setting represents days defendants are not being treated in state hospitals.

Costs

Program curriculum and materials

Competency restoration services consist of a group of participants engaging in a classroom setting. Defendants are given a study packet that consists of informative handouts that help explain the criminal justice system. These handouts delve into the details of courtroom players, policies, and procedures. Defendants are also taught what is expected of them in a courtroom setting. Each participant's packet also includes worksheets that the participant completes at the end of each chapter. These worksheets help a defendant demonstrate what they have learned and help the instructor assess what areas a defendant has mastered or where may need more help.

Material costs would include computer workstations for program staff to use, in addition to scanners and extra monitors to enhance efficiency. There are three shifts of employees to staff the program 24 hours a day. The largest shift is the day shift; that shift has seven employees that

⁶ The Texas Department of State Health Services reported in 2012 the average daily cost of a forensic hospital bed day was \$407. Using the Consumer Price Index inflation calculator, that cost translates to \$425.41 for 2016.

would require computer workstations. By providing computer workstations for the largest shift, the program can ensure that all shifts will have access to enough computers to remain efficient. The cost of these workstations should be added to the curriculum costs, which consist of the cost of workbook packets paper and printing costs, in addition to basic office supplies.

Program staffing

Legislation permitting jail-based competency restoration services in Texas is clear on program staffing needs. Program staff, who are required to be onsite 24 hours a day, consist of a LPHA (licensed practitioner of the healing arts) to serve as a program coordinator, a psychiatrist, a psychologist, a registered nurse, a licensed vocational nurse, and social workers and case managers to run classes and work with inmates in the program. As previously discussed, the program needs to maintain a staff to inmate ratio of 1:3.7. The baseline staff consists of 5 employees. That allows up to 18 inmates to engage in the program at any given time. Additional inmates will require the hiring of more case managers to maintain the proper ratio.

These staff can be hired by the jail or contracted from a private company. If hired by the jail, the county's pay scale will provide baseline salary costs for each position. If contracted from a private company, the cost of the contract will include salary costs for the entire staff.

Increased jail staffing

Mentally ill inmates require more supervision in a jail setting than the general population of inmates. A jail-based competency restoration program would entail congregating mentally ill inmates together for classes and programming. These classes, while staffed by program employees, also need to be overseen by jail staff. This increased staff is a cost that needs to be factored into the benefit-cost analysis.

Inmates that engage in jail-based competency restoration programming attend classes on a part-time schedule. When not engaged in classes and programming, these inmates will be housed in their regularly assigned jail housing. Curriculum for jail-based competency restoration involves participants attending classes 15 hours per week. These hours represent the time that the jail will need to provide additional staffing. This cost is determined by multiplying the time inmates are congregated in programming by the cost of a corrections officer's pay.

Housing for mentally ill inmates in the program

Historically, inmates received competency restoration services either in a state hospital facility or in an outpatient facility. The proposed jail-based competency restoration services would require that incompetent defendants be incarcerated in the jail during their term of treatment. As previously discussed, housing a mentally ill inmate is significantly more expensive than housing an inmate in the general population of the jail. This cost can be determined by averaging the number of days an incompetent defendant spends in treatment and multiplying that amount by the number of eligible defendants projected to participate in the program. The product of that calculation represents the average number of days that the jail would be incarcerating incompetent defendants in the jail rather than sending them to another facility for restoration. When multiplied by the average cost of incarcerating a mentally ill inmate, that product would represent this cost.

Time Dimension

The time dimension of a benefit-cost analysis is meant to help convert future costs and benefits into present day values. For purposes of this analyses, costs and benefits for a proposed jail-based competency restoration program are evaluated for a time period of one year. The

proposed project has no initial up-front costs or large capital investment. The program is contained in existing infrastructure at the local jail. There are no maintenance costs to the program, as the upkeep of the jail complex is an existing cost that the county maintains under its current budget. Because there are no large upfront fixed costs, this analysis can be limited to one year. For this reason, a time dimension is not necessary in the analysis.

Chapter Summary

This chapter describes the methods used to measure in dollars the costs and benefits outlined in the operationalization table. These costs and benefits will be used in a simple formula to determine if proposed jail-based competency restoration services would be cost-beneficial for Travis County, Texas.

Chapter Five: Results

Introduction

This chapter presents the results of the benefit-cost analysis performed on the proposal of jail-based competency restoration services for Travis County, Texas. Each identified benefit and cost is calculated in net present value and then added together to determine the net present value of the proposed project. Benefits and costs were calculated using data from 2016.

The proposed rules for jail-based competency restoration programs as written by the 2013 workgroup established by the Texas Department of State Health Services state that incompetent defendants can remain in the program up to 70 days. At the end of 70 days, if a defendant has not regained competency and the case has not been dismissed by the state, then the defendant's name shall be added to the state's clearinghouse list for admission to a state hospital. Data collected for defendants whose treatment took more than 70 days were deleted from the dataset. Therefore, results are based on the remaining eligible defendants, those who either regained trial competency or had their cases dismissed within 70 days of receiving treatment.

Benefits

Reduction in waitlist days

The primary benefit in offering jail-based competency restoration services is the reduction of days a defendant waits in jail for transfer to a state mental health hospital. The

potential cost savings is found by multiplying the number of defendants that waited in jail for admission to a state hospital in 2016 by the average number of days that a defendant was incarcerated while on the waitlist. In 2016, 91 eligible defendants waited in jail for admission to a state hospital for competency restoration. The average number of days that a defendant waited for admission was 37. The product of 91 defendants times an average of 37 days is 3,367 days that the Travis County jail incarcerated eligible mentally ill inmates on the waitlist. The average cost of housing a mentally ill inmate in jail in 2016 was \$232 per day. This represents a potential cost savings of \$781,144.00 in 2016.

Reduction in travel costs

Defendants that are treated for competency restoration in a state hospital setting typically require two round-trips made by escorting sheriff deputies. One trip is to admit a defendant into the state hospital and one trip is to retrieve the defendants from the state hospital and return him or her to the county jail. In some cases, a defendant's case may be dismissed while they remain at the state hospital. For this reason, not all defendants can account for two round-trips. The eligible defendants in 2016 required the Travis County Sheriff's Office to travel 18,542.25 miles back and forth between the Travis County Correctional Complex located at 3614 Bill Price Road, Del Valle, TX 78617 and various state hospital facilities across the state. In 2016, the State of Texas' mileage reimbursement rate was \$0.54 per mile.⁷ If the eligible defendants in 2016 had not needed to be transported, Travis County would have gained a cost savings of 18,542.25 times \$0.54, equaling \$10,012.82.

⁷ Mileage rate for 2016 provided by the Texas Comptroller of Public Accounts and can be accessed here: <https://fmx.cpa.texas.gov/fmx/travel/texttravel/rates/historical.php>.

Another potential cost savings is the cost of the hours that sheriff deputies spent making trips to and from the state hospitals. The total number of man hours spent transporting eligible defendants in 2016 was 472.5 hours. The baseline hourly pay rate of a sheriff deputy in Travis County, Texas is \$25.15.⁸ This represents a potential cost savings of \$11,883.38.

Reduction in wait for forensic exams

When a judge issues an order for a competency exam, many defendants wait for a contracted psychiatrist to visit them at the jail and conduct a forensic interview and examination. The examiner then reviews the offense report and past mental health records to finalize their examination. If jail-based competency restoration staff could perform these examinations, defendants would not need to wait as long for interviews and examiners would have ready access to needed records. Of the 91 eligible defendants, data are available for 34 defendants. That data show an average wait of 14 days between the order for evaluation and the report being sent to the court. 34 times 14 equals 476 days that could be saved if program staff could conduct these evaluations. Those 476 days times the average daily cost of housing a mental health inmate equals a potential cost savings of \$110,432.00.

Reduction in cost of forensic exams

Forensic competency exams are typically performed by psychiatrists and psychologists in the area that contract with local jurisdictions. The costs of forensic exams depend on the hours that an examiner spends interviewing a subject, reviewing past mental health records

⁸ According to Travis County's Human Resources and Management Department, a sheriff deputy's baseline salary is \$52,301.81. This salary was converted to an hourly pay rate using www.convertunits.com.

and records related to the instant offense, and writing the report for the court. Misdemeanor cases average 1.5 hours per examination and felonies average 4 hours per examination. The difference in timeframes can be contributed to the complexity of felony cases. In 2016, there were 91 defendants that were eligible for jail-based competency restoration services. Of those 91 defendants, 42 were charged with felonies and 49 were charged only with misdemeanors.⁹ The 42 felony evaluations represent 168 hours of work by a psychiatrist. The 49 misdemeanor cases represent 73.5 hours of work. Added together, those 91 defendants represent 241.5 hours of work by a psychiatrist to conduct forensic competency exams. The average hourly billing rate for psychiatrist in Travis County is \$480.00.¹⁰ If program staff took on the role of examining defendants for competency, this could potentially save the county \$115,920.00 per year.

Reduction in forensic state hospital bed days

Each defendant that doesn't require admission to a state hospital for competency restoration represents a cost savings to the state. In 2016, 91 defendants were eligible for jail-base competency restoration services in Travis County. These 91 defendants would have spent 4,247 days in jail-based competency restoration services before either they regained competency to stand trial or the state elected to dismiss their criminal charges. By multiplying 4,247 days times the average daily cost of a forensic state hospital bed day (\$425.41), we can

⁹ When a defendant is arrested on multiple charges, they are classified according to their highest charge. A defendant charged with one felony and multiple misdemeanors will be categorized as a felony defendant.

¹⁰ An open records requested submitted to the Travis County Auditor under the Public Information Act has not been responded to as of the writing of this chapter. Hourly rate estimates received from a licensed forensic psychiatrist practicing in Travis County, Texas over the last 15 years.

estimate the cost savings to the state. If the state did not have to admit nor treat these defendants in 2016, the state would see a cost savings of \$1,806,716.27.

Costs

Program curriculum and materials

Program staff will require computer workstations in order to complete their job duties. The proposed jail-based competency restoration program is staffed with 3 shifts that ensure staff are onsite 24 hours a day. By outfitting the program with enough workstations to accommodate the largest shift, the day shift, the county can rest assured that all program staff have access to a computer workstation at all times. The day shift consists of seven employees, therefore the program will need to purchase seven computer workstations (laptops and monitors), two scanners to allow staff to maintain efficiency, and a printer. The cost of a laptop workstation is \$2,000, the cost of each scanner is \$600, and extra monitors are \$150 each. The program can share one printer at a cost of \$700. These upfront costs total \$16,905.

In addition to upfront technology costs, the program will need to maintain basic supplies for printing participant workbooks and conducting business. These materials, which consist of paper, pens, and routine office supplies, are estimated to cost \$3,000 per year.¹¹

Program staffing

Program staff requirements are statutorily outlined to include a psychiatrist, a psychologist, a registered nurse, a licensed vocational nurse (LVN), a licensed practitioner of the

¹¹ At the time of this writing, an open records request submitted to Travis County's local mental health authority, Integral Care, has not been responded to; supply cost estimates based on Travis County departmental budgets.

healing arts (LPHA), and multiple qualified mental health professionals (QMHPs). Furthermore, the Texas Department of State Health Services (DSHS) created a workgroup in 2013 on jail-based competency restoration pilot programs. That workgroup’s proposed rules and regulations outlines the staff needed on each of three daily shifts to ensure proper treatment and support for program participants. Those positions and their baseline salaries are included in Table 5.1. Baseline salaries were taken from the Travis County’s Human Resources and Management Department’s published pay scale. If Travis County did not have a position listed in their pay scale, salary information was taken from Travis County Integral Care’s Community Competency Restoration Program (CCRP). Integral Care is the local mental health authority in Travis County, Texas and CCRP is their outpatient competency restoration program. As seen in Table 5.1, the estimated annual cost of program staff is \$683,737.05.

Table 5.1 Salary Costs	
Day shift	Base Salary
Psychiatrist	\$143,376.06
Psychologist	\$63,638.43
Registered Nurse	\$42,382.08
Licensed Vocational Nurse	\$37,024.00
LPHA (licensed practitioner of healing arts)	\$53,000.00
QMHP (qualified mental health professional)	\$42,382.08
QMHP (qualified mental health professional)	\$42,382.08
Evening shift	
Registered Nurse	\$42,382.08
Licensed Vocational Nurse	\$37,024.00
LPHA (licensed practitioner of healing arts)	\$53,000.00
Night shift	
Registered Nurse	\$42,382.08
QMHP (qualified mental health professional)	\$42,382.08
QMHP (qualified mental health professional)	\$42,382.08
Total Salaries	
\$683,737.05	

Increased jail staffing

As previously discussed, the proposed jail-based competency restoration services would require mentally ill inmates to be housed in a specialized unit while receiving their treatment. This housing can be an existing unit in the jail, as there are currently unit assigned for other programs offered to inmates. Therefore, the cost of increased jail staffing is limited to the number of hours that the jail is responsible for treating these inmates. Competency restoration services are offered for 15 hours per week. There are 52 weeks in a year. Therefore, the jail would need to staff this specialized unit for 780 hours per year. The baseline hourly rate of a sheriff deputy is \$25.15. For safety reasons, units in the jail are staffed by a minimum of two officers. 780 hours times \$25.15 per hour times 2 officers equals a potential cost to the jail of \$39,234.00.

Housing for mentally ill inmates in program

While inmates are participating in jail-based competency restoration services, they will be incarcerated in the local jail. Inmates remain in the program until they regain competency or their case is dismissed by the State of Texas, whichever comes first. Of the 91 eligible defendants, 43 were restored to competency and 48 had their charges dismissed. The total number of days it took in treatment for these 91 defendants to either regain competency or for the state to dismiss charges was 4,247. That number was determined by counting the days from admission to the hospital to the day either 1) the hospital reported the defendant competent or 2) the state dismissed the criminal charges. Those 4,247 days represent the anticipated days

that the eligible defendant would receive treatment in the jail-based competency restoration program. If we multiply 4,247 days by the cost of housing a mentally ill inmate at \$232 per day, we can calculate this cost to the county as being \$985,304.00.

Net Present Value of Proposed Jail-Based Competency Restoration Services at the County Level

Once benefits and costs have been identified, measured, and monetized, those values can be used to determine the net present value of a project. Net present value is the present value of the sum of the benefits minus the present value of the sum of the costs. The benefits and costs from the current analysis are plugged into this formula in Table 5.2. As the table shows, the net present value of our analysis at the county level is -\$698,787.85. Any value less than zero represents that the project is not cost-beneficial, meaning that the costs outweigh the benefits. This table shows that providing jail-based competency restoration services in Travis County, Texas is not cost-beneficial to the county.

Table 5.2 Net Present Value of Jail-Based Competency Restoration Project - County Level	
Benefits	
Reduction in waitlist days	\$781,144.00
Reduction in travel costs	
mileage	\$10,012.82
hourly pay	\$11,883.38
Reduction in wait for exams	\$110,432.00
Reduction in costs for exams	\$115,920.00
Total Benefits	\$1,029,392.20
Costs	
Program upfront material costs	\$16,905.00
Program curriculum supplies and materials	\$3,000.00
Program staff	\$683,737.05
Increased jail staff	\$39,234.00
Cost to house eligible inmates	\$985,304.00
Total Costs	\$1,728,180.05
Net Present Value of project	-\$698,787.85

Net Present Value of Proposed Jail-Based Competency Restoration Services at the State Level

The state plays a financial role in how incompetent defendants are treated in Texas; competency restoration services provided to these defendants in an inpatient state hospital setting are paid for with state money. If defendants can avoid costly hospital admission, the state can realize a cost savings. This additional benefit is included in the Table 5.3; this table shows the net present value at the state level of providing jail-based competency restoration services in local jails. Because the cost of jail-based services are cheaper than the cost of inpatient state hospital services, offering jail-based competency restoration services in local jails can provide a larger benefit state-wide. Table 5.3 shows the net present value at the state level is \$1,107,928.42.

Table 5.3 Net Present Value of Jail-Based Competency Restoration Project - State Level	
Benefits	
Reduction in waitlist days	\$781,144.00
Reduction in travel costs	
mileage	\$10,012.82
hourly pay	\$11,883.38
Reduction in wait for exams	\$110,432.00
Reduction in costs for exams	\$115,920.00
Reduction in forensic state hospital bed days	\$1,806,716.27
Total Benefits	\$2,836,108.47
Costs	
Program upfront material costs	\$16,905.00
Program curriculum supplies and materials	\$3,000.00
Program staff	\$683,737.05
Increased jail staff	\$39,234.00
Cost to house eligible inmates	\$985,304.00
Total Costs	\$1,728,180.05
Net Present Value of project	\$1,107,928.42

Chapter Summary

This chapter shows the results of the net present value calculations for the benefits and costs of offering jail-based competency restoration services in Travis County, Texas. At the county level, the net present value of the project is significantly less than zero, clearly demonstrating that the project costs outweigh the benefits. These figures show local policymakers that the cost of offering jail-based competency restoration services in Travis County, Texas is not a sound economic decision.

At the state level, the net present value is significantly more than zero, showing that jail-based competency restoration services is cost-beneficial on a larger scale. Reducing the number of days incompetent defendants are committed to state hospitals creates a significant cost savings to the state. County level jail-based competency restoration programs can provide a greater utility to the state as a whole.

Chapter Six: Conclusion

Introduction

This chapter summarizes the policy issues surrounding incompetent defendants in both the criminal justice system and mental health system, provides an overview of the benefit-cost analysis performed on jail-based competency restoration services in Travis County, Texas, as well as provides recommendations for future research. This applied research project utilized existing data from 2016 to estimate whether providing jail-based competency restoration services in Travis County, Texas would be cost-beneficial.

Summary

Incompetent defendants housed in county jails can wait weeks, sometimes months, to be admitted to a state hospital facility for restoration services. This wait creates a burden on both the criminal justice system and the mental health system. Criminal charges against incompetent defendants are stayed, meaning that the case does not progress through the criminal justice system while the defendant remains incompetent. This pause in justice creates a logjam of defendants in local jails. Additionally, treating mentally ill criminal defendants in the state mental health system can take its toll on the states limited resources. State hospitals that accept forensic patients will have less room to treat patients under civil commitments and voluntary commitments than hospitals that do not accept forensic patients. There needs to be a better approach to treating incompetent defendants without slowing down two large and complex systems of public services for the community.

In an attempt to justify jail-based competency restoration services, a benefit-cost analysis was performed using 2016 data from Travis County, Texas. At the county level, that analysis showed that the project would cost more money than it would save, making it a poor choice to implement, from an economic perspective, for the residents of Travis County. However, because it offers the potential to serve mentally ill inmates in need of competency restoration services quickly, rather than waiting on the list for state hospital admission, there are some social benefits that warrant further exploration. These benefits, which are hard to monetize in a benefit-cost analysis, could include improved mental health treatment, reduced occurrences of malingering, and a potential decrease in civil lawsuits filed against local jurisdictions.

At the state level, the financial implications are much different. By eliminating 91 forensic admissions to the state hospital, the state will realize a cost savings of over one million dollars. If replicated across multiple counties, jail-based competency restoration services could have a large impact on the state budget. Additionally, if the state were to reimburse counties for the cost of implementing jail-based competency restoration services, the project could become financially viable in local jurisdictions and still net a cost savings to the state.

The net present value of implementing jail-based competency restoration services in Travis County is -\$678,882.85. The net present value to the state of implementing jail-based competency restoration services is \$1,107,928.42. If state-reimbursed jail-based competency restoration services were replicated in multiple counties across the state, the public would see a benefit in both cost savings and a more efficient forensic mental health system.

Recommendations for future research

A significant amount of money is spent housing mentally ill, incompetent inmates in local jails. Literature shows that the cost of treating an incompetent defendant in an outpatient setting is nearly half the cost of housing an incompetent mentally ill defendant in jail.¹² The potential to save hundreds of thousands, if not millions, of dollars can be found in offering outpatient competency restoration services. Future research should be done to explore the cost of increasing outpatient competency restoration services in Travis County, Texas. Once that cost is established, a benefit-cost analysis can be conducted to determine if expanding outpatient services can provide a net economic benefit to the community.

One of the primary challenges in conducting this benefit-cost analysis was the lack of consistent data between multiple county agencies. Data were collected from multiple agencies and pieced together from different systems. As technological advances reach the public sector, policy makers should explore the feasibility of merging multiple agencies onto the same software system. Future research would benefit from a standardized systematic approach.

Lastly, this benefit-cost analysis does not factor in the collateral consequences of offering jail-based competency restoration services to inmates. For example, if inmates are admitted to a jail-based program and are not placed on the waitlist for a forensic bed in a state hospital, than the inmates remaining on the waitlist should proceed toward hospital

¹² In Beard's 2014 article, *Competency restoration in Texas prisons: A look at why jail-based restoration is a temporary fix to a growing problem*, outpatient competency restoration services were estimated to cost \$106 per day.

admittance much more quickly. This creates a reduction in waitlist days that is not accounted for in this study. Future research to apply collateral consequences to the equation should be conducted to gain a clearer picture of all the potential benefits of offering jail-based competency restoration services.

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