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The Effect of Risk Assessment Data and Colleagues' Consensus  
on Clinical Decisions to Discharge Insanity Acquittees

A dissertation submitted in partial satisfaction of the  
requirements for the degree of Doctor of Philosophy  
in Social Welfare

by

Jaclyn Muheizen

2013



## ABSTRACT OF THE DISSERTATION

The Effect of Risk Assessment Data and Colleagues' Consensus  
on Clinical Decisions to Discharge Insanity Acquittes

by

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Doctor of Philosophy in Social Welfare

University of California, Los Angeles, 2013

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Every day, in psychiatric institutions, forensic clinicians face the complex task of making decisions to discharge violent mentally disordered offenders back into the community. Because unaided violence risk prediction can be faulty and the process of discharge determination is poorly understood, clinicians are left to make judgments under uncertainty. This study sought to answer two research questions: (1) Does the presence of and information presented in an actuarial risk assessment influence clinicians' discharge readiness decisions and their confidence in such decisions? and (2) Does the suggestion effect presented by the recommendation of the community transition program and/or treatment team affect discharge decisions? The study

utilized a web-based clinical vignette that was presented to clinicians at Patton State Hospital. The vignette presented a realistic scenario and was varied in 18 ways, based on risk assessment data, treatment team consensus, and community transition program consensus. The absence of a risk assessment or the presence of a high-risk assessment was a significant predictor of a negative discharge recommendation, while a positive community transition program consensus or positive treatment team consensus was a significant predictor of a positive recommendation. A positive recommendation from the community transition program was the strongest predictor overall. Most clinicians felt moderately to very confident in their discharge decisions. None of the possible mediating variables provided complete mediation between the predictor variables and discharge decision.

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## DEDICATION

I lovingly dedicate this dissertation to my amazing family and circle of friends. Your love and support has made all of this possible! To Ma and Peach, thank you for teaching me that I could do anything and for standing behind me as I've tried. To Joslyn, you've been my biggest cheerleader since we were children and I dedicate everything I do in life to you. To Shiva, I am not sure how I may have fared over the last year without your friendship and love. You're encouragement and help as well as occasional beat downs were a true catalyst for this dissertation. Finally, to Stuart, I know I am not the most likely doctoral student and I appreciate more than words can say your honesty, patience and guidance throughout my journey. Thank you.

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## VITA

Jaclyn Leia Muheizen is a California native who graduated from St. Lucy's Priory High School in Glendora, California, in 1995. She then attended Cal Poly Pomona, where she graduated magna cum laude with a Bachelors of Arts in Psychology in 1999. After working as a community-based counselor for the developmentally disabled, she realized that her passion was social work. She entered the graduate program at California State University, San Bernardino, and completed a Master's in Social Work in 2003, with departmental honors. She became a licensed clinical social worker (LCSW) in 2005 and has been employed as a forensic social worker at Patton State Hospital for the last ten years. She also works as an adjunct professor at California State University, San Bernardino, in the Master's of Social Work department. She is a member of the National Association of Social Workers, mentors and supervises MSW interns, and sits on the research committee at Patton State Hospital. Her research interests include forensic psychiatric patients, mental illness, and the law.

# CHAPTER 1

## INTRODUCTION

Javier D. Robinson received rehabilitative treatment as an insanity acquittee at Patton State Hospital (PSH), California's largest maximum security forensic facility, for attempted murder and assault with a deadly weapon against his sister. After being released in 2008, he was suspected of stabbing his roommate to death in January 2010 (Consalvo, 2010). Mr. Robinson was never formally charged with the crime because he evaded the police and later committed suicide. Such scenarios illustrate the complex and delicate nature of forensic clinicians releasing such mentally disordered offenders back into the community.

Forensic clinicians, who serve as gatekeepers, confront the often-conflicting objectives of providing efficient treatment and timely release while still protecting the public (Beer et al., 2005; Dallet, 1993; Fox, 2008; Steadman & Cocozza, 1973). Forensic clinicians must weigh the public's anxiety and safety along with the needs and rights of the acquittee and use available data to make thoughtful determinations (Beer et al., 2005; Fox, 2008; McDermott & Thompson, 2006; Rogers, 2000).

Forensic discharge decisions have long been understood to be complex, ambiguous, and inefficient (Hartlage, Freeman, & Horine, 1968; Katz & Woolley, 1975). Like most states, California's insanity acquittee statute (PC 1026) does not identify what information should be used in making discharge assessments (Fox, 2008). As a result, unlike typical prisons, where offenders receive specified sentences, insanity acquittees may find themselves receiving treatment indefinitely. In lieu of specific sentences for insanity acquittees, clinical assessments are used to determine discharge decisions, which are based on the likelihood of future dangerous acts (Callahan & Silver, 1998). Although the court sets a maximum term of commitment, it is

not used as a discharge date but, rather, as a point at which the court will review the individual's ongoing need for treatment.

The current discharge process in California involves approval from a variety of stakeholders, including the acquittee, the state hospital treatment team (IDT) composed of state hospital clinicians, the county-based Conditional Release program (CONREP), and representatives from the criminal justice system, such as the public defender and judge (Linhorst, Turner, & Woodward, 2000). For the purposes of this dissertation, CONREP will be referred to as the community transition program and the IDT will be referred to as the treatment team.

In California, insanity acquittees are evaluated for discharge readiness on a monthly basis by the treatment team. Discharge decisions are generally based on clinical judgments and, contrary to research recommendations, rarely rely on actuarial tools (Katz & Woolley, 1975; Monahan et al., 2000; Stubner, Gregor, & Nedopil, 2006), which are statistical or formal methods that aid in predicting clinical outcomes (Douglas, Ogloff, & Hart, 2003). Most relevant to forensic discharge decisions are actuarial tools that predict risk for future violence and provide risk assessments, which include the Violence Risk Appraisal Guide (VRAG; Quinicy, Harris, Rice, & Cormier, 1998) and the Hare Psychopathy Checklist (Hare, 1991).

Risk assessment tools are relevant to state hospital clinicians, where all patients have a history of violence and pose a risk to the health and safety of the community (Lareau, 2007). Without such tools, clinicians' ability to predict violence is no better than chance (Grondahl, Gronner, & Sexton, 2009; Heilbrun & Witte, 1999; Hilton & Simmons, 2001; McDermott et al., 2008) or the predictions of laypersons (Green & Baglioni, 1997). Over the past decade, more than 100 studies have supported the use of risk assessments (Rogers, 2000), particularly in forensic evaluations for discharge (McDermott et al., 2008). In short, risk prediction aided by

risk assessment data surpasses prediction based only on clinical judgment (Hilton & Simmons, 2001; McDermott et al., 2008). Nevertheless, there is a gap between the scientific support of actuarial methods and their actual use in clinical settings (Elbogen, 2002; Odeh, Zeis, & Huss, 2006).

McDermott et al. (2008) reviewed patient medical charts at Napa State Hospital (NSH) in California to identify which assessments and documents were used by clinicians to determine discharge readiness (McDermott et al., 2008). They found, as have others (Heilbrun & Witte, 1999; Hilton & Simmons, 2001; McDermott et al., 2008), that risk assessment reports were lacking in most patients' charts and, as such, were rarely available for use in discharge readiness assessments. Risk assessments are also infrequently used in the discharge assessment process at Patton State Hospital. None of the treating psychiatrists at Patton directly utilizes structured risk assessment tools in his or her evaluations. Instead, the hospital has several forensic evaluators for over 1,500 patients, which makes the standard use of risk assessments unrealistic.

Because risk assessments are seldom performed, little is known about how risk assessment data influence clinicians' discharge evaluations (Manguno-Mire, Thompson, Bertman-Pate, Burnette, & Thompson, 2007; Monahan et al., 2000). Given the threat that forensically-committed individuals pose to the community, as witnessed in the case of Javier D. Robinson, there is ongoing concern from the public and academic community about the need to improve discharge determinations. To achieve timely and safe discharges, it is essential to understand the discharge process and how clinicians utilize risk assessment data in their decisions (Beer et al., 2005; Elbogen, Mercado, Scalora, & Tomkins, 2002). Rather than focusing research on what clinicians should be doing, it is more useful to address what clinicians are doing in their discharge readiness analyses. Thus, this study looked at whether the presence

of risk assessment data influences clinicians' decisions about discharge readiness and, specifically, addressed the following research questions:

1. Does the presence of and information presented in an actuarial risk assessment influence clinicians' discharge readiness decisions and their confidence in such decisions?
2. Does the suggestion effect presented by the recommendation of the community transition program and/or treatment team affect discharge decisions?

Having the answers to these questions will assist clinicians and state hospital administrators to establish appropriate treatment services, will lead to better clinical training and performance (Garb, 2005), and will facilitate improved psychiatric care and discharge outcomes (Tuzman & Cohen, 1992). Further, it may elucidate the potential problems related to relying on clinical opinions to determine length of stay (LOS) for insanity acquittees.

### **Theoretical Background**

Forensic clinicians make decisions under conditions of uncertainty, as they are asked to predict an acquittee's likelihood for violence (Miller, Tabakin, & Schimmel, 2000). There is no way to guarantee that they will make the right choice (Kahneman, Slovic, & Tversky, 1982; Krynski & Tenenbaum, 2007; Nierenberg, 2009; Tversky & Kaneman, 1974), so clinicians must weigh the risk of the acquittee to commit future violent acts against his rights for freedom, and, as such, the cost of being wrong is great. There are multiple approaches to decision making, each with its own set of advantages and disadvantages (Ferriera, Garcia-Marques, Sherman, & Sherman, 2006; Miller et al., 2000) and a variety of unforeseeable consequences. There are numerous theories used to understand how decisions under uncertainty are made. Two theories, discussed below, were chosen to guide this research.

First, decisions under uncertainty may be analyzed according to how they fit into value systems. According to Hundert (1987), the highest-risk cases involve irreconcilable conflicts between legal, ethical, and clinical values. In every decision, certain values will be given higher worth. For example, some clinicians may place more value on an acquittees' right to freedom while others may place more value on protecting the community. According to this view, the decisions that clinicians make are a direct result of how they weigh such values.

To make informed decisions in the face of competing values, a clinician must scrutinize all information, options, and consequences (Miller et al., 2000). As noted in attribution theory, people search for causal understandings of everyday events (Corrigan, 2000; Weiner, 1980, 1995). The clinician's explanation of the causes of mental illness, violence, and the level of acquittee personal responsibility are all part of clinicians' value systems and are pertinent to discharge decisions.

Value systems are individual and subjective. Because the insanity acquittee discharge process involves input from a variety of stakeholders, it is often the case that disagreements occur and value systems conflict. Regardless of such conflicts, clinicians must render a definitive decision for or against discharge. A clinician may agree with the release of an acquittee but, at the same time, face disagreement from the community transition program. A clinician may believe that an acquittee is clinically unstable and ill suited for release, but he may not meet the specific legal criteria to prolong hospitalization. This study provided an analysis of how clinicians make discharge recommendations when conflicting value systems are presented via disagreements among stakeholders and in view of risk assessment data that took into consideration clinicians' causal impressions.



Decisions under uncertainty also may be looked at as based on the desirability of potential outcomes and their likelihood of happening (Tversky & Fox, 1995), the central tenet of prospect theory (Kahneman & Tversky, 1979). In making decisions, one hopes to maximize outcomes and minimize risks and is more willing to take risks to evade losses than to seek gains. Forensic clinicians face pressure to make accurate discharge decisions that minimize risks and avoid losses.

In particular, two of the key tenets of prospect theory are relevant to this study. First, individuals tend to place significantly more worth on losses than on gains of the same value. Accordingly, forensic clinicians likely place more value on minimizing the risks of their discharge decisions. The decisions for or against discharge both have negative consequences. Potential losses to discharging an acquittee include the acquittee's returning to drugs or alcohol, committing another crime, or acting out violently toward himself or others. Potential losses to detaining an acquittee include violating an acquittee's rights to freedom and the cost of ongoing treatment. When comparing possible losses, the cost of making an inaccurate decision in favor of discharge is substantially higher, as it may result in the loss of life. According to prospect theory, clinicians may avoid potential losses by detaining acquittees, regardless of the opinions of the community transition program, other clinical team members, or a risk assessment. Further, attribution theory postulates that the outcomes of one's decisions will affect future decisions (Corrigan, 2000). This study sought to understand how clinicians weigh such potential losses and gains and whether risk assessment data affect this process.

Second, prospect theory holds that individuals place a substantial value on certainty in decisions and are more likely to gamble on decisions with certain outcomes, regardless of the reward. According to the competence hypothesis, individuals prefer to bet on the beliefs for

which they feel the most confidence (Tversky & Fox, 1995), and certainty heightens confidence in decisions. In making discharge recommendations, clinicians will likely feel most confident and certain when they are given optimal data and clinical information. As such, clinicians will likely be most confident in discharge decisions where clinical support from the treatment team, the community transition program, and risk assessment data are present. This study varied the level of certainty provided to clinicians via agreement or disagreement from stakeholders as a means to determine how such variables affect discharge decisions and the use of risk assessment data.

The decision to discharge insanity acquittees is often made under uncertain conditions with life-or-death consequences. The theory of ethical decision making (Hundert, 1987) and prospect theory (Kahneman & Tversky, 1979; Tversky & Fox, 1995), provide ways to better understand how such complex decisions are made. Clinicians have many sources of evidence available to them to make optimal discharge decisions (Nierenberg, 2009). Among them is risk assessment data, which improve clinical accuracy in violence risk prediction and discharge determination (Dawes, Faust, & Meehl, 1989; Garb, 2005; Kennedy, Bresler, Whitaker, & Masterson, 2007; McDermott & Thompson, 2006). Because so few risk assessments are conducted, it is difficult to ascertain how clinicians would use such information in their discharge readiness assessments if it were present (McDermott et al., 2008). A better understanding of how discharge decisions are made may lead to increased accuracy in such judgments, which could result in enhanced treatment outcomes and fewer post-discharge re-offenses.

## **CHAPTER 2**

### **LITERATURE REVIEW**

To improve clinicians' predictions of risk, there is a need for an enhanced understanding of how forensic discharge decisions are made (Archer, Bedell, & Amuso, 1980; Goldstein & Katz, 1960; Rogers, 2000; Werner & Reid Meloy, 1992). While there are many studies on violence risk prediction, there are few on the day-to-day practices of discharge decision making in forensic institutions (Allen, Logue, & Coyne, 1990; Manguno-Mire et al., 2007; Stubner et al., 2006). This chapter will present the literature on California's discharge process and acquirtees as well as on clinical judgments and actuarial methods.

#### **California's Discharge Process**

The use of the insanity defense as well as the treatment and discharge of insanity acquirtees varies considerably across states (McDermott & Thompson, 2006; Stubner et al., 2006). California has the highest number of individuals who receive treatment in state psychiatric hospitals (California's Health and Human Service Department, 2001), and California's acquirtees spend more time institutionalized than those who are found guilty of the same crimes in other states (Silver, 1995).

The current discharge process in California involves approval from a variety of stakeholders, including the acquirtee, treatment team, the community transition program, and representatives from the criminal justice system, such as the public defender and judge (Linhorst et al., 2000). The decision to discharge is usually initiated by the treatment team but can be initiated by other stakeholders. Specifically, the treatment team is the state hospital-based team responsible for the care of approximately 25 patients and includes a psychiatrist, psychologist, social worker, rehabilitation therapist, registered nurse, and psychiatric technician. The

treatment team assesses discharge readiness monthly and provides formal evaluations on progress toward discharge to the court and the community transition program twice a year.

In 1986, county-based community transition programs were created in California to provide post-discharge supervised treatment. Each acquittee has an assigned evaluator who conducts semi-annual assessments for discharge readiness. This assessment is based on an interview with the acquittee, a review of the chart and relevant documents, and a discussion with Patton staff. Among the legal stakeholders is the public defender who supervises the acquittee's legal proceedings during hospitalization. The public defender does not render a decision on discharge readiness but will defend the acquittee's rights to freedom as needed. Finally, a mental health court judge oversees the entire process. This judge is sent biannual reports on the acquittee from the treatment team and the community transition program and has the final decision on discharge.

The decision to discharge is based on the acquittee's ability to meet his assigned discharge criteria as evidenced by documentation in the chart, interviews with the acquittee, and clinical feedback from the treatment team and the community transition program. Discharge criteria are standardized goals used to assess release readiness and are evaluated every month in a treatment team conference. There are six basic discharge criteria, including medication adherence, understanding of mental illness, commitment to recovery and sobriety, understanding of the crime, creation of a wellness recovery action plan (WRAP), and commitment to safety and to the community transition program's rules. An example of a discharge criterion is, "The individual will voluntarily take his medications and know the name, dosage and how often he is supposed to take his medications. He will be able to describe how his medications treat his mental illness."

Meeting all criteria, however, does not necessarily indicate readiness for release. Additionally, the treatment team is at liberty to adjust criteria, as needed, without input from acquittees and may expect unstated levels of progress for the meeting of criteria. For instance, the above criterion does not specify to what degree the acquittee must understand his medication. It is not clear, for example, whether it is sufficient for the acquittee to state that he understands his need for medication and that it makes him feel better or whether the acquittee needs to be able to state the medication, doses, and times as well as how his medication works and what type of benefit it provides. This determination is left up to the treatment team. Further, treatment teams may require that acquittees sustain certain behaviors for varying lengths of time. Thus, it is not clear whether the criterion is met if the acquittee simply meets it once or whether he needs to sustain it for a particular length of time.

Discharge criteria can be inconsistent in regard to readiness across acquittees. This lack of regularization leads to inconsistencies in LOS for insanity acquittees (Jaworowski & Guneva, 2002), with hospitalization stays for the same crimes that vary by as much as 20 years. Although there is variability in LOS across states, a timely discharge from a state hospital is considered less than five years, while a prolonged stay is over seven years and the average is 5-7 years (Linhorst et al., 2000).

### **California's Acquittees**

Discharge practices and the characteristics of insanity acquittees vary by state (Fox, 2008; Wiederanders, Bromley, & Choate, 1997). In California, penal code (PC) section 1026 pertains to individuals found guilty but not guilty by reason of insanity and indicates that such defendants must demonstrate that they were incapable of knowing or understanding the quality of the act or were incapable of distinguishing right from wrong at the time of the offense. In

2001, there were 4,377 individuals housed in California's state hospitals (California Health and Human Services Department, 2001). Unlike most states that treat insanity acquittees in small hospitals with mixed forensic and non-forensic populations, California operates five large forensic hospitals, including Napa, Patton, Coalinga, Metropolitan, and Atascadero. Each of California's forensic facilities serves populations that range from 600 to 1,500, with the largest commitment type's being insanity acquittees, who comprise approximately 1,150 patients statewide. The cost of treating acquittees is estimated at over \$100,000 per year per patient (California Health and Human Services Department, 2001; Silver, 1995).

Research conducted nationally over the past 40 years demonstrates that certain patient characteristics are associated with discharge readiness but that these characteristics vary by state (Archer et al., 1980; Beer et al., 2005; Callahan & Silver, 1998; Goldstein & Katz, 1960; Linhorst et al., 2000; Stubner et al., 2006; Vijayalakshmy, Smith, Schleifer, Morris, & McLennon, 2006). Muheizen (2009) conducted a preliminary study to understand California's insanity acquittees' demographic, criminal, and clinical characteristics and their associations with discharge. Subjects included all insanity acquittees ( $N = 2,176$ ), admitted to one of five state hospitals between December 1970 and January 2008, who were eventually discharged. They represented 68% of the full sample of 3,102 acquittees. The results indicated that California's acquittees were predominantly male (86%), single (64%), White (58%), and unemployed prior to admission (94%) and had less than a high school graduate education (75%). Of the sample, 39% had only one hospitalization, but 34% had over three. The majority of the sample (63%) was admitted between the ages of 19 and 40 and most (80%) committed a violent felony offense, most commonly assault with a deadly weapon. Close to half of the sample (49%) had a global assessment functioning (GAF) that indicated serious impairment and were

diagnosed with a psychotic disorder on their initial Axis I diagnosis (63%), based on the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV; American Psychiatric Association, 2000).

The acquittees' LOS ranged from 2 to 13,310 days, with a mean of 1,399 days (median = 921, SD = 1,577). Of the 2,176 discharged, 75% were discharged within five years, 17% were discharged within 5 to 10 years, and 8% were discharged after 10 years. Specifically, women; better-educated acquittees; those with non-psychotic diagnoses, higher GAF scores, more previous hospitalizations, and fewer violent crimes; and who are older upon admission tended to have a timely LOS, i.e., less than 5 years. Likewise, men; less-educated acquittees; and those with psychotic diagnoses, lower GAF scores, more violent offenses, and fewer hospital admissions tended to have an LOS of greater than 5 years. All of the characteristics that predicted timely discharge were indicative of increased resources, less-severe mental illness, increased maturity, and higher amounts of past treatment. These are characteristics assessed by the treatment team during monthly conferences and are weighed heavily when predicting risk for future dangerousness (Muheizen, 2009).

### **Clinical Judgments**

It is estimated that, in a five-year period, over 95,000 discharge decisions are made in large psychiatric institutions (Mahler, Pokorney, & Pfafflin, 2000). Risk prediction and discharge decisions are among the most important types of clinical judgments (Elbogen, 2002; Monahan et al., 2005; Taylor, 2006). Most decisions to discharge are complex (Linhorst et al., 2000) and involve ethical dilemmas (Tuzman & Cohen, 1992). Further, forensic clinicians are accountable to the acquittees, community, and legal system to make safe determinations and may be held liable for their discharge decisions (Manguno-Mire et al., 2007).

Despite the consequences of these decisions, actuarial methods such as risk assessments are rarely used to determine discharge readiness in forensic settings (Dawes et al., 1989; Manguno-Mire et al., 2007; Stubner et al., 2006). Elbogen (2002) conducted a literature review on violence risk assessment and noted that, although there is strong support for actuarial methods, they are rarely used in clinical practice. Instead, most discharge decisions are based on clinical impressions, little consistency, and no scientific rigor (Elbogen, 2002; Elbogen et al., 2002; Hilton & Simmons, 2001; Jaworowski & Guneva, 2002; Kennedy et al., 2007; Manguno-Mire et al., 2007; McDermott et al., 2008).

Independent clinical predictions of risk have been described as inconsistent, unreliable, subjective, and informal (Bell & Mellor, 2009) and believed to be no better than decisions made by chance (McDermott & Thompson, 2006; Steadman, 1984). Research has shown that psychiatrists are wrong two out of three times in making clinical predictions (Monahan, 1981), tend to be overconfident in their judgments (McNeil, Sandberg & Binder, 1998), and are inconsistent in clinical judgments about identical cases (Regehr, Bogo, Shlonsky, & LeBlanc, 2010). In *Barefoot v. Estelle*, the Supreme Court recognized that psychiatrists are often wrong in predicting violent behavior (McDermott & Thompson, 2006), and, in *Estelle v. Smith*, the American Psychiatric Association noted that psychiatrists are incapable of accurately predicting dangerousness (Kroll & Mackenzie, 1983).

Among the problems associated with violence risk prediction is scant training in the use of actuarial tools and insufficient information on post-discharge outcomes (Werner & Reid Meloy, 1992; Wettstein, 2005), which results in insufficient feedback on the accuracy of discharge decisions (Garb, 2005). Further, when opinions are used to make discharge decisions, it is likely that a clinician's values, beliefs, training, life experiences, and education may bias



decisions (Bell & Mellor, 2009; Elbogen, 2002; Goldstein & Katz, 1960; Manguno-Mire et al., 2007; McLaughlin, 2002). Moreover, heuristics or cognitive shortcuts are commonly used by seasoned clinicians to make sense of complex information (Kahneman et al., 1982) and can lead to systematic errors (Crumlish & Brendan, 2009; Garb, 2005).

Mental health professionals disagree on definitions of discharge readiness (Allen, Logue, & Coyne, 1990; Becker & Banks, 1986; Caton & Gralnick, 1987; Garb, 2005; Katz & Woolley, 1975) and demonstrate low agreement on risk prediction (Werner & Reid Meloy, 1992). Inconsistencies in discharge readiness decisions have been found between clinicians and outpatient program evaluators, such as the community transition program (O'Brien, Mellsoy, McDonald, & Ruthe, 1995), and across different forensic hospitals (Stubner et al., 2006) and professional disciplines (Allen et al., 1990). These disagreements about and different definitions of discharge readiness among the decision makers may lead to discrepancies in discharge determinations and inequitable LOS (Becker & Banks, 1986). Regardless of the problems inherent in using clinical impressions, the courts continue to rely on them as the basis of legal rulings on discharge (Werner & Reid Meloy, 1992).

### **Actuarial Methods**

Actuarial methods are statistical approaches that use formal and mechanical means and tools to arrive at clinical decisions (Bell & Mellor, 2009; Douglas et al., 2003). Specific to this review are those actuarial methods that aid in the prediction of risk for future violence. Overwhelmingly, research supports the use of actuarial instruments to aid clinicians in risk prediction and discharge decisions (Dawes et al., 1989; Garb, 2005; Kennedy et al., 2007; McDermott & Thompson, 2006). A review of the literature indicates that hundreds of journal

articles over the last 20 years cite their ability to improve clinical accuracy and prediction (Dawes et al., 1989; Grove, Zald, Lebow, Snitz, & Nelson, 2000; Rogers, 2000).

Actuarial methods enable the standardization of risk predictions and discharge decisions and are considered superior to clinical judgments alone (Bell & Mellor, 2009). Actuarial methods are able to minimize bias (Fox, 2008) and reduce errors in risk prediction. Further, actuarial methods can lead to more effective rehabilitation than that based on clinical judgment alone (Stubner et al., 2006). Overall, actuarial methods can contribute to fair treatment of acquittees, decreased recidivism, and increased public safety (Hilton & Simmons, 2001).

Actuarial methods, however, have some potential limitations. They are noted to lack generalizability, as most tools are designed for use on particular populations only. Other limitations include the omission of possible risk factors and a tendency to lead to longer lengths of hospitalizations (Rogers, 2000). Actuarial methods have been criticized for a lack of sensitivity to the potential for positive change (Douglas et al., 2003) or clinical improvements (Stubner et al., 2006), as most tools tend to focus on deficits rather than protective factors. Further, Monahan et al. (2000) noted that actuarial tools can be viewed as cumbersome, time consuming, and impractical in clinical settings. There also is resistance to their use from clinicians who may fear that the tests will pose a challenge to their skills or professional significance or that the tests dehumanize patients (Bell & Mellor, 2009). Moreover, clinicians value protective factors and clinical improvement, which are inherent to psychotherapeutic practice but are lacking in risk assessments (Stubner et al., 2006).

Nearly 60 years ago, Meehl (1954) argued that actuarial methods were superior to clinical methods. In Meehl's review of 20 scientific studies, only one cited clinical judgments as superior to statistical methods. Elbogen et al. (2002) surveyed 134 clinicians to identify which

risk factors they felt were relevant to predicting future violence. Although clinicians noted empirically based risk factors as important, they identified non-empirically based behavioral variables as more relevant in predicting risk. Clinicians viewed certain actuarial tools such as the VRAG as relevant, yet, when given the VRAG to use in their practice, they focused on behavioral variables and failed to use it consistently (Elbogen et al., 2002).

Hilton and Simmons (2001) observed 187 discharge tribunal groups in Ontario, Canada, to determine whether available VRAG scores affected decisions to discharge. The tribunals base their discharge decisions on testimony from the treatment team, an interview with the acquittee, and psychiatric documentation, including risk assessment data. The findings indicated that risk assessments had little impact on clinical discharge decisions. Other studies have found that risk assessments are not commonly found in acquittee charts (McDermott et al., 2008) and are rarely used in discharge decisions (Heilbrun & Witte, 1999; Hilton & Simmons, 2001; McDermott et al., 2008). Of the many studies available on actuarial tools and forensic discharge, only one identified significant clinical use of actuarial data. Manguno-Mire et al. (2007), who used review panel hearings in Louisiana to understand the factors that affect discharge decisions, found that the two most important factors in discharge were psychopathy and age of first criminal offense and that clinicians used actuarial data from the Hare Psychopathy Checklist Revised (PCL-R) in discharge decisions.

### **Summary**

California's forensic population is growing, which has caused an increased need for accurate and timely discharge decisions. Research that evaluates discharge processes in forensic hospitals is scarce and has focused on what clinicians should be doing rather than what they actually are doing (Elbogen et al., 2002; Manguno-Mire et al., 2007). In California, in particular,

due to overcrowding in its state hospitals and extended acquittee LOS compared to other states, evaluating the discharge process is warranted. The literature supports the use of actuarial tools and their capability to improve clinicians' predictions of violence, yet most discharge decisions in forensic settings are based on clinical impressions rather than on formal tools (Dawes et al., 1989; Jaworowski & Guneva, 2002; Kennedy et al., 2007; Kroll & Mackenzie, 1983; Manguno-Mire et al., 2007; McDermott & Thompson, 2006; Stubner et al., 2006). Clinicians often do not have actuarial assessment tools available, and there is little information on how such data is or would be used when present.

## **CHAPTER 3**

### **RESEARCH METHODS**

Despite the extensive findings that support the use of actuarial instruments for predicting future violence, clinicians typically make assessments unaided by these tools and, instead, rely on their clinical judgment (Katz & Woolley, 1975; Monahan et al., 2000; Stubner et al., 2006). Little is known about how clinicians use actuarial risk assessment data, when present, in forensic discharge decisions (Elbogen et al., 2002; McDermott et al., 2008; Monahan et al., 2000). Thus, this study sought to answer the following research questions: (a) Does the presence of and information presented in an actuarial risk assessment influence clinicians' discharge readiness decisions and their confidence in such decisions? (b) Does the suggestion effect presented by the recommendation of the community transition program and/or treatment team affect discharge decisions?

#### **Design**

The purpose of this study was to evaluate the use of actuarial data and colleague consensus by clinicians in discharge decisions for insanity acquittees. The study employed a factorial design to test the effect of each independent variable separately and to test the interaction between these variables on discharge decisions. The study utilized a 3 x 3 x 2 design that involved a web-based clinical vignette. One vignette was experimentally varied in 18 ways via the information provided about the risk assessment data as well as the treatment team and community transition program discharge decision consensus. The study was conducted in a naturalistic clinical setting, at Patton State Hospital in California.

The clinical decision-making process is complex and subjective (Taylor, 2006). Much of this complexity arises from the fact that clinical decisions are affected by many personal and

professional factors. Factorial designs offer a manageable way to understand such complex decisions (Taylor, 2006) and have been used successfully in the field of social work, mental health, and criminal justice (Brauer et al., 2009; Grondahl et al., 2009; Taylor, 2006).

Vignettes use realistic case scenarios as a means to understand how particular variables affect clinicians' real-world decisions (Taylor, 2006). Vignettes may be shaped by clinical knowledge, prior studies, or relevant literature (Taylor, 2006). They are more economical and less time consuming than are chart reviews (Veloski, Tai, Evans, & Nash, 2005), and their findings are useful to real-world practice (Klein, 1998). Vignettes provide for experimental control and, thus, for causal inference about which variables affect decisions. The real-life complexities presented in the vignettes contribute to the external validity (Taylor, 2006), and the randomized assignment of respondents to experimental conditions contributes to the internal validity of the study. These vignettes allow for elucidation of how particular variables could affect clinicians' decisions and perceptions in the discharge of insanity acquittees (Brauer et al., 2009).

### **Vignette Development**

This study's vignette concerns an acquittee and is followed by items that concern the decision-making process (Appendix A). The realistic case description was based on the findings of Muheizen's (2009) preliminary study of California's acquittee population. By using Muheizen's findings, the vignette reflects a realistic portrayal of a typical acquittee and the discharge assessment situation. The vignette was presented as a case that the clinician is about to review for discharge readiness with his or her treatment team. It was written in a legal style that is commonly used by forensic clinicians. The writing is succinct, includes only factual

information, and is typical of the court reports, assessments, and evaluations used in such forensic institutions.

Prior to its use, the vignette was presented to a focus group at Patton. The focus group included one interdisciplinary treatment team, comprised of a psychiatrist, psychologist, social worker, rehabilitation therapist, registered nurse, and psychiatric technician who make regular discharge decisions for insanity acquittees. The focus group was excluded from the final sample. The team was asked to rate the vignette in terms of the degree to which it represented a realistic acquittee and discharge evaluation situation. Based on the focus group feedback, small changes were made to the vignette. The most significant was the replacement of the phrase *insanity acquittee* with the more commonly used *guilty but not guilty by reason of insanity* as a means to make the vignette more understandable to hospital staff.

### **Independent Variables**

The three independent variables (IVs) that are likely to affect clinical discharge decisions are (a) the presence of risk assessment data, (b) the discharge decision consensus of the treatment team, and (c) the discharge decision consensus of the community transition program. The presence of risk assessment data was varied in three ways (high-risk data, low-risk data, or no data), the treatment team discharge decision consensus was varied in three ways (positive recommendation, negative recommendation, or mixed recommendation), and the community transition program discharge decision consensus was varied in two ways (positive recommendation or negative recommendation). This 3 x 3 x 2 design allowed for the exploration of 18 different combinations of these three independent variables (Figure 1).

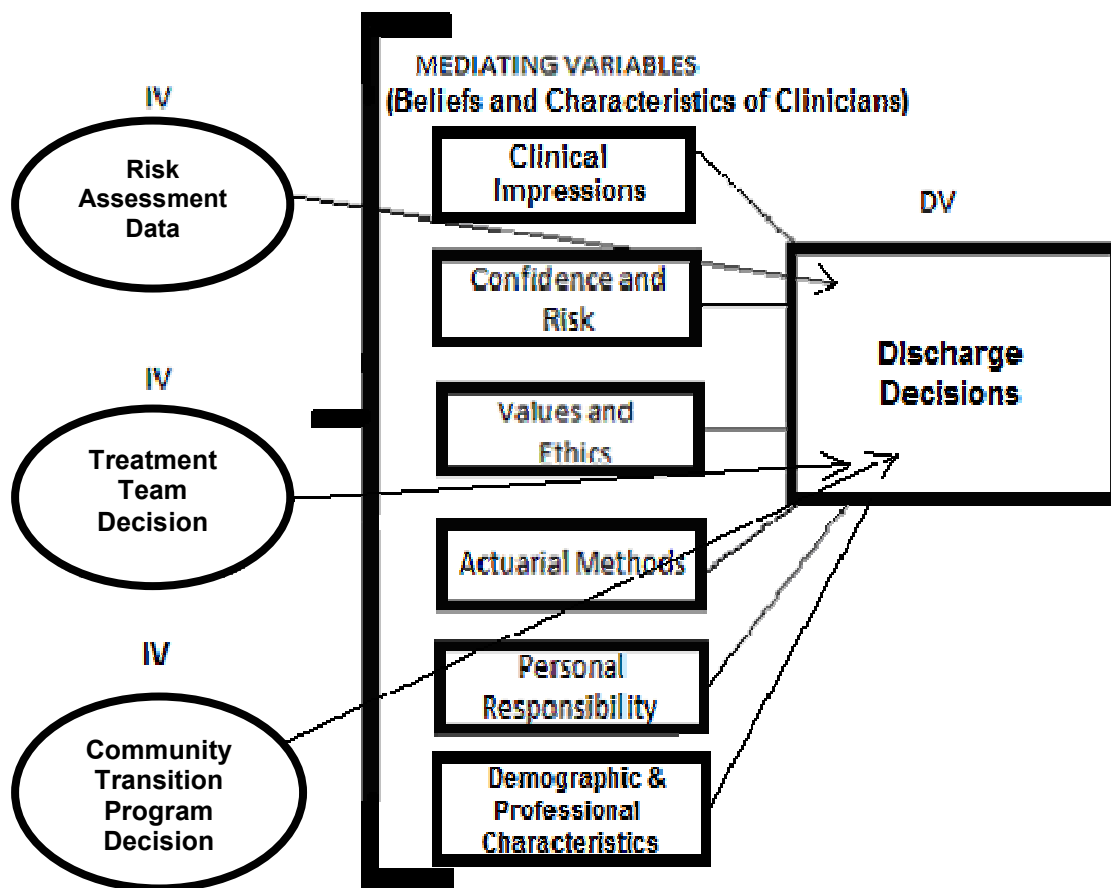


Figure 1. Relationship between independent variables and mediating variables on the discharge decision.

The first independent variable is the presence of risk assessment data. In actual discharge decisions, these data are not consistently present. As noted, three versions of this independent variable (high-risk data, low-risk data, or no data) were used. At Patton, risk assessments are conducted by referral only, by a small team of specialized clinicians. All Patton risk assessments include a chart review, a psychiatric interview, and use of the VRAG. The findings are presented in two- to three-page summaries, with a final verdict rendered of low, medium, or high risk for re-offense. Clinicians are aware that risk assessments may be requested to supplement



discharge decisions, but they are not required. Although some clinicians are not qualified to complete such assessments, most are familiar with their content and have read a completed version.

Among the stakeholders in the decision to release acquittees are the treatment teams and the community transition program. The treatment team is composed of clinicians who provide psychotherapeutic treatment, conduct assessments, and make discharge decisions for acquittees. The community transition program is the county-based conditional release program that provides community integration services and outpatient structured care to acquittees post-release. Each acquittee's community transition program sends one representative to evaluate the acquittee semi-annually for discharge readiness. This representative is typically a licensed psychologist or social worker.

The second independent variable is the discharge decision consensus of the treatment team. As noted, three versions of this independent variable (positive recommendation, negative recommendation, or mixed recommendation) were used. The third independent variable is the discharge decision consensus of the acquittee's community transition program. This independent variable has two versions for discharge (positive recommendation or negative recommendation).

More than half of the time, the community transition program and the treatment team disagree on discharge decisions, which leaves clinicians to render decisions without the community transition program's support. Additionally, members of the same treatment team often disagree in their discharge decision. Suggestion effects occur when the suggestion of another individual affects the decision of the participant (Temerlin & Trousdale, 1969). Prestige suggestions or those presented by experts have been known to bias diagnosis and other clinical

decisions (Temerlin & Trousdale, 1969). As such, colleagues' discharge decisions are likely to have some effect on clinicians' impressions on discharge readiness.

### **Dependent Variable**

The dependent variable (DV) is the clinicians' decision to discharge. In this study, a decision is classified as the choice between a set of discharge alternatives (Dowie, 1993): to discharge the acquittee or detain him for ongoing treatment. As such, the dependent variable was measured as binary (yes/no) to indicate whether the respondent believes that the acquittee should be discharged. At Patton, discharge decisions are made on a monthly basis for each acquittee.

### **Mediating Variables**

Mediating variables are those that mediate the effect of the IV on the DV. Mediating variables included clinician characteristics and beliefs related to discharging acquittees and acquittees in general. The development of these variables was guided by the theoretical background and relevant literature. Each of the six mediating variables of clinical impressions, opinions on actuarial methods, confidence and risks, values and ethics, personal responsibility, and demographic and professional characteristics were considered in terms of their effect and its direction.

**Clinical impressions.** Several items concerned clinician's opinions about LOS rates, successful recommendations, and how frequently acquittees are discharged. Items also focused on clinicians' impressions on the indicators for discharge readiness and factors such as discharge criteria, criminal behavior, and LOS used by clinicians to gauge readiness, e.g., "I relied on Mr. Smith's discharge criteria as a guide for making his discharge recommendations."

**Opinions on actuarial methods.** Several items concerned clinicians' impressions of the use and value of actuarial methods in the discharge process, e.g., "Input from a formal risk assessment (i.e., VRAG) is very helpful to me in determining discharge readiness." It is important not only to identify whether clinicians use the actuarial data provided in the vignette but also to determine their opinions on, their familiarity with, and how often they use these tools.

**Confidence and risks.** According to prospect theory, clinicians make decisions that maximize outcomes and minimize risks and are more willing to take risks to evade losses than to collect gains (Kahneman & Tversky, 1979). Confidence in one's choice and the risk for the public, acquittee, and clinician are likely to affect discharge decisions and were considered, e.g., "I often worry about the potential risks to the acquittee if I make an incorrect discharge recommendation."

**Values and ethics.** According to Hundert (1987), every decision involves the analysis of values, and certain values will be given greater worth. An example of an item in regard to values and ethics is, "I frequently face conflicts between my legal, ethical, or clinical values when making discharge readiness determinations."

**Personal responsibility.** Weiner and Kukla's (1970) attribution theory concerns the consequences of causal beliefs and attitudes toward personal responsibility. In keeping with attribution theory, clinicians' perceptions of the personal responsibility and issues that are behind acquittees' crimes are likely to affect their discharge decisions. The items address clinicians' opinions on the acquittee's ability to control his behavior, the insanity acquittee statute, and the causes and treatment of mental illness, e.g., "Insanity acquittees should be held accountable by the legal system for their crimes."

**Demographic/professional characteristics.** The literature indicates that demographic characteristics, professional affiliation, and experience will affect discharge decisions. Thus, demographic items include the respondent's age, gender, discipline, ethnicity, years of professional experience, and number of year worked at PHS.

### **Instrument Development**

The researcher-developed, 42-item questionnaire was guided by the theoretical background and relevant literature, including the recommendations of Dillman and Bowker (2001) for creating web questionnaires. A web-based study was selected to allow for fast completion, minimal paperwork, low costs, and high accessibility for participants (Dillman & Bowker, 2001). All clinicians and possible respondents at Patton are trained in the use of the Internet and have access to email and Survey Gizmo, as discussed below, at work.

Survey Gizmo is a web-based software site that provides online questionnaire development, data collection, and data storage as well as provides professional formatting. This website supports vignette-based studies and ensures anonymity and randomization. The instrument was uploaded onto Survey Gizmo, and neutral colors and an easy-to-read font were chosen for the presentation. The instrument utilized one-click items and no drop-down menus or the ability to skip items. For ease of use, the questionnaire was divided into sections by topics. Items also were presented in tables, by which all items and answers could be viewed without the respondent's moving up and down the page. Additionally, the instrument tracked the respondent's progress in completing the survey at the bottom of each page (Dillman & Bowker, 2001).

The instrument was constructed primarily of short, 5- or 6-point Likert-scale items, with one yes/no question and three open-ended questions. Item 1 concerned whether to discharge or

detain and was measured as dichotomous (yes/no). Item 2, which used the 6-point Likert scale (1 = strongly disagree to 6 = strongly agree), focused on clinicians' confidence in their decision to discharge. Item 3 presented the standard Patton discharge criteria, which respondents ranked in importance, using the 6-point Likert scale. Item 4 allowed respondents present the discharge criteria, not provided by the standard list, used in their decision. Items 5-12 utilized the Likert scale to measure clinicians' agreement with various aspects of the vignette.

Items 13-23 utilized the 5-point Likert scale (1 = never to 5 = always) to address how often clinicians face particular situations in their general discharge experiences. Items 24-31 utilized the 6-point Likert scale to determine clinicians' agreement on statements about personal responsibility and the insanity acquittee statute. Two open-ended questions concerned how many acquittees are discharged from Patton each year and the average number of years that most acquittees are hospitalized at Patton.

If the findings had indicated that the predictor variables did not affect the outcome variable, brief qualitative interviews would have been conducted with the two treatment teams to better understand the rationale for discharge decisions. The findings, however, did indicate that the predictor variables had an effect on the discharge decisions and, as such, interviews were not used.

### **Setting and Sample**

The study setting is Patton, which is California's largest forensic state hospital. Patton was opened in 1893, is located in a suburban community in Southern California's San Bernardino County, and has a licensed bed capacity of 1,287 and over 3,000 employees. Patton's mission is to empower forensic and civilly committed individuals to recover from mental illness through the use of recovery principles and evidenced-based practices within a safe,

structured, and secure environment. As noted, Patton is California's only maximum-security facility; its perimeter is protected by the California Department of Corrections, which enables the facility to treat the most violent and high-risk offenders in the state (California Department of Mental Health, 2003).

The researcher has been employed as a licensed clinical social worker at Patton for the past ten years. The impetus for this study was the researcher's observations as part of an interdisciplinary team that treats and discharges insanity acquittees. The stringent security and confidential nature of the hospital, however, make conducting research in such a setting difficult. Based on the researcher's employment at Patton, this study was approved, and it was expected that, because the researcher is employed at Patton, the response rate would be good.

A sampling frame includes all of the individuals in a given population. The sampling frame at Patton includes approximately 1,000 clinicians. The sample included all of the mental health professionals who were treating insanity acquittees at Patton. Each unit of 50 patients has two treatment teams, consisting of a total of 20 clinicians. Each treatment team includes one psychiatrist, one psychologist, one social worker, one rehabilitation therapist, three nurses, and three psychiatric technicians. The sample was collected from the over 30 units that treat acquittee patients at Patton. Patton administration gave approval to send the questionnaire to all clinicians who work with and discharge insanity acquittees.

Because this study used 18 different versions of the vignette, a sizeable sample was required. An a priori G\*Power analysis was conducted to determine an appropriate sample size (Erdfelder, Faul, & Buchner, 1996). Assuming that all the data were complete, this study required a sample of at least 430 for a power of 80%, which is generally considered sufficient.

Although participant selection was not random, each participant was randomly assigned to read one of the 18 vignettes.

### **Questionnaire Implementation**

Before this study was presented to the Institutional Review Board (IRB) of Patton, the California State IRB, and the UCLA IRB for final approval, it was pilot tested on one treatment team at Patton. Findings from the pilot tests were not included in the results but were used to make needed adjustments to the questionnaire. All pilot testing and feedback collection were completed on the same day to ensure that impressions were fresh. The researcher attended a selected treatment team discharge conference and explained the study and procedures to the 10 members. They were encouraged to provide feedback on any portion of the study, including the vignette, questionnaire, web design, appearance, formatting, verbiage, or directions. They were emailed the questionnaire's link and then followed the process on Survey Gizmo. The treatment team then met to share their feedback on the same day. Feedback was overwhelmingly positive and only included a few adjustments, e.g., correction of grammatical errors.

One month before the introductory email was sent; the researcher visited one of the weekly social work, psychology, psychiatry, and rehabilitation therapy discipline meetings at Patton to introduce the study. The researcher read a scripted statement that described the study and asked for participation.

All approved potential participants were emailed one week prior to the start of the study and provided with additional introductory information about the study and its process (Appendix B). To avoid contamination of the results, potential participants were asked to avoid discussing the study, the questionnaire items, and their answers with colleagues.

The first page of the survey contained the informed consent (Appendix C). To ensure anonymity, completion of the study acted as consent. Participants' logins indicated that they understood their right to agree to freely participate or to freely refuse to participate in the study.

Selected participants were emailed a link to the study's website. They were provided with brief directions on how to complete the study. Once the survey was opened, it was completed in one sitting. Participants were able to take as much time as needed but were not permitted to go back and change answers or to sign off and return to the study at a later time. The completion of the study took approximately 10 minutes.

An incentive was used to ensure a good response rate. All individuals in the sample pool were given the opportunity to win one of four \$50 gift cards to Target. To participate in the raffle, individuals sent the "thank-you" page at the end of the survey, which included their name and phone extension via Patton mail, to the researcher. Although the raffle was not anonymous, there was no way to connect the respondents' answers to their names. The raffle took place one week after the completion of the data collection. During the six weeks of data collection, this researcher also visited change-of-shift meetings and provided candy as another means to encourage participation.

One week after the study was initiated, a follow-up email that reminded potential respondents of the study was sent (Appendix D). Two weeks after that, one final, identical reminder email was sent. Participants were given a six-week timeframe to complete the study.

As the surveys were completed, Survey Gizmo stored and recorded the data. Survey Gizmo utilizes a password-locked, secure system to ensure that output is protected. Any printed output was stored in a locked filing cabinet and was destroyed at completion of this study. Once



the data analysis was completed, a summary of the study's findings was made available to respondents, if requested. A summary also appeared on the in-house Patton website.

### **Data Analysis**

In this study, the analysis sought to identify the effect of the vignette's diverse variables on the respondent's decision (Taylor, 2006). Specifically, this study concerned the effect of risk assessment data (IV), treatment team consensus (IV), and community transition program consensus (IV) on discharge decisions (DV). Regression models describe the relationships among variables (Hosmer & Lemeshow, 2000). Logistic regression is well suited for vignette studies because it describes the relationship between each predictor variable and the binary (yes/no) outcome variable (discharge decision). It has become the primary analytic approach for the analysis of dichotomous dependent variables (Hosmer & Lemeshow, 2000) and is believed to be the most powerful analytic approach to studies that utilize vignettes (Taylor, 2006).

In this study, logistic regression allowed for a tentative causal explanation between the IVs and the decisions to discharge (Taylor, 2006) and controlled for the influence of different IVs in the same analysis. Logistic regression identified the effect size of each of the IVs on the decision via the proportion of variance explained. In this way, it tested the effect of each IV separately as well as the interaction between these variables on clinical discharge decisions.

Additionally, mediating variables affect the relationships between the IVs and the DV. The analysis tested whether clinicians' opinions and characteristics mediate the relationship between risk assessment data (IV), treatment team consensus (IV), or the community transition program consensus (IV) and clinicians' discharge decisions (DV). MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) identified 14 different methods for testing models with mediating variables. For the purposes of this study, the causal step method was used

(MacKinnon et al., 2002). The model was analyzed first through correlations to identify the significance between and among the IV, DV, and mediating variables. If significant correlations were identified, multiple regression was used to predict the effect of risk assessment data (IV), treatment team consensus (IV), and the community transition program consensus (IV) as well as clinicians' characteristics and opinions (mediating variables) on the discharge decisions (DV). If the effect of the mediating variables was significant, the direct effect of the IV on the DV was determined from the *Beta* value, which indicates the strength of the mediation.

## CHAPTER 4

### RESULTS

This web-based experimental study was guided by two research questions: (a) Does actuarial risk assessment information influence clinicians' discharge decisions and their confidence in such decisions? (b) Does the recommendation of the community transition program and/or the treatment team affect discharge decisions? To address these questions, clinicians at Patton were presented with one of 18 variations of a single, real-world vignette. The vignettes were randomly assigned to clinicians when they entered the online survey website. Each vignette was viewed by 18-36 respondents, and most vignettes were read by approximately 25 clinicians.

The vignette varied in 18 ways, as there were three conditions for the risk assessment (none, high risk, low risk), two conditions for the recommendation by the community transition program (positive, negative) and three conditions for recommendation by the treatment team (positive, negative, mixed). After reading the vignette clinicians were asked a yes/no question: "Given this set of circumstances, please indicate whether you personally would recommend Mr. Smith for discharge." Across all 18 versions of the vignette, discharge recommendations were almost evenly divided between those who recommended discharge (47%) and those who did not recommend discharge (53%).

#### **Patton's Clinician Sample**

An email was sent to a sampling frame of approximately 1,000 clinicians who treat and discharge insanity acquittees, inviting them to participate in the survey. Each clinician works on a treatment team that treats 25 patients. Each treatment team consists of 10 clinicians, including

one psychiatrist, one psychologist, one social worker, one rehabilitation therapist, three nurses, and three psychiatric technicians.

Of the 1,000 clinicians, 433 participated, for a return rate of 43%. Of these 433 respondents, there were 32 (7%) psychiatrists, 51 (12%) psychologists, 30 (7 %) rehabilitation therapists, 71 (16%) social workers, 203 (47%) psychiatric technicians, and 46 (11%) registered nurses. The modal respondent was female (65%), Caucasian (43%), employed as a psychiatric technician (31%), aged 35-54 (61%), employed at Patton for 1-5 years (34%), and had 11-20 years of professional experience in her field. The sample was broadly representative of the clinical staff at Patton. Specifically, at Patton, most clinicians are female, Caucasian, psychiatric technicians, and have 5 years of employment and 13 years of professional experience. As such, the sample can be considered representative of the clinical staff at Patton.

### **Assessment Data and Colleagues' Opinions**

As noted, one vignette was varied in regard to the information on risk assessment data and the recommendations of the treatment team and of the community transition program. The primary concern was how these variables affected clinicians' discharge decisions.

As seen in Table 1, overall, risk assessment data and colleague consensus affected discharge decisions. Generally, positive risk assessment data and colleague consensus were associated with decisions that favored discharge, while negative risk assessment data and negative colleague consensus were associated with decisions that opposed discharge. In the absence of risk assessment data or when the treatment team decisions were mixed, clinicians were split evenly in their discharge decision.

Table 1

*Chi Square tests on Discharge Decision by Risk Data, Treatment Team and Community*

*Transition Program Recommendation*

<b>Variable</b>	<b>Vignette Variation</b>	<b>% (n) Recommend Against</b>	<b>% (n) Recommend For</b>	<b>p</b>
Nature of Risk Assessment Data	Low Risk	30% (35)	70% (82)	.000
	High Risk	60% (98)	40% (65)	.000
	None Available	45% (68)	55% (83)	.648
Treatment Team Recommendation	For	32% (51)	68% (108)	.000
	Against	61% (82)	39% (53)	.000
	Mixed	50% (68)	50% (69)	.374
Community Transition Program Recommendation	For	33% (72)	67% (146)	.000
	Against	61% (129)	39% (84)	.000

Specifically, 68% of respondents who were assigned a vignette with a positive treatment team recommendation favored discharge, while 61% of those who were assigned a negative treatment team recommendation opposed discharge. When a treatment team recommendation was mixed, discharge decisions were split equally, at 50%. The community transition program’s recommendation also affected clinicians’ discharge decisions, with positive recommendations resulting in 67% in favor of discharge and negative recommendations resulting in 61% against discharge. Finally, 70% of respondents who read vignettes in which there was low-risk data favored discharge, while 60% who read high-risk data vignettes opposed discharge. Those

assigned a vignette with a lack of assessment data were close to evenly split in their recommendations, with 45% not in favor and 55% in favor of discharge.

### **Clinician Confidence about Discharge Recommendation**

After reading their assigned vignettes, clinicians were asked, “Please indicate how confident you are in your discharge recommendation for Mr. Smith.” Respondents answered the question using a 5-point Likert scale (1 = not at all confident, 2 = slightly confident, 3 = somewhat confident, 4 = moderately confident, and 5 = extremely confident).

Cross-tabulations and chi-square tests determined how the variations in the three independent variables affected clinicians’ confidence. As seen in Table 2, overall, clinicians were confident in their discharge decisions, with approximately two-thirds (67%) feeling moderately to very confident and only 6% feeling not at all confident. Comparing confidence across the 18 vignettes, the results indicated that clinicians were moderately to very confident, regardless of the risk assessment data, community transition program recommendation, or treatment team recommendation presented. Specifically, 71% of clinicians who were presented with a lack of assessment data, 65% with high-risk assessment data, and 67% with low-risk assessment data were moderately to very confident in their decision. In regard to the community transition program, 69% of clinicians presented with a positive recommendation and 65% with a negative recommendation were moderately to very confident; and in regard to the treatment team recommendation, 68% of clinicians presented with a positive recommendation, 68% with a negative recommendation, and 65% with a mixed recommendation felt moderately to very confident.

Table 2

*Chi Square tests of Clinician Confidence by Vignette*

<b>Variable</b>	<b>Vignette Variation</b>	<b>% (n) Moderately/ Very Confident</b>	<b>% (n) Somewhat Confident</b>	<b>% (n) Slightly/Not at All Confident</b>	<b><i>p</i></b>
Nature of Risk Assessment Data	Low Risk	67% (78)	21% (25)	12% (14)	.621
	High Risk	65% (105)	19% (31)	18% (28)	.424
	None Available	71% (107)	17% (25)	23% (19)	.752
Treatment Team Recommendation	For	68% (107)	16% (25)	17% (26)	.751
	Against	68% (93)	19% (26)	13% (17)	.751
	Mixed	66% (90)	22% (30)	13% (18)	.621
Community Transition Program Recommendation	For	69% (151)	19% (42)	12% (26)	.424
	Against	65% (139)	18% (39)	17% (35)	.752

As seen in the table, the chi-square tests did not yield any significant differences in confidence levels among the 18 variations of the three independent variables. Although clinicians heeded the information presented by risk assessment data and colleague consensus when making their discharge decisions, this information did not affect their confidence levels.

### **Effect of Risk Assessment Data and Colleagues' Opinions on Discharge Decisions**

The next step was to determine the simultaneous effects of the three independent variables on discharge decisions. Logistic regression was chosen because it allows for a

tentative causal explanation of the three independent variables on the dichotomous decision to discharge (Taylor, 2006).

All three independent variables, risk assessment data, community transition program recommendation, and treatment team recommendation, were run in a logistic regression with the dependent variable of decision to discharge. Clinicians responded to, “Given this set of circumstances, please indicate whether you personally would recommend Mr. Smith for discharge.” The discharge decision was coded as 1 = for and 0 = against. In the analysis, all three independent variables were entered at the same time to compare against the constant model. The reference groups consisted of all those who did not read the specific vignette in the comparison.

A test of the full model was statistically significant (chi square = 89.154,  $df = 5$ ,  $p = .000$ ), which indicates that the model is better at predicting discharge decisions than the constant model to which it was compared. Together, the three independent variables improved the likelihood of predicting discharge recommendations and explained approximately 25% of the variance.

The model allows for the prediction of discharge decisions with an average of 70% accuracy (69% for negative discharge recommendations and 72% for favorable discharge recommendations). The results indicated that there were no differences between the observed values and those of the model; as such, the null hypothesis could not be rejected ( $p = .673$ ). This indicates that risk assessment data and colleague consensus significantly affected discharge decisions.

While the three independent variables together had an even greater effect, each of the three independent variables had an individual effect. Of the eight versions of the three independent variables entered into the model, four were significant predictors of discharge



decision and added predictive power to the model, as shown in Table 3. The lack of assessment ( $p = .007$ ) and high risk assessment ( $p = .000$ ) were significant predictors of a negative discharge recommendation, while a positive community transition program consensus ( $p = .000$ ) and positive treatment team consensus ( $p = .001$ ) were significant predictors of a positive recommendation.

Table 3

*Logistic Regression on the Effect of Risk Assessment and Colleague Consensus on Decision to Discharge*

<b>Variable</b>	<b><i>n</i></b>	<b><i>B</i></b>	<b><i>SE</i></b>	<b><i>Wald</i></b>	<b><i>p</i></b>	<b><i>Exp (B) Odds Ratios</i></b>
Lack of Assessment	152	-.755	.279	7.304	.007	.470
High-Risk Assessment	164	-1.513	.282	28.824	.000	.220
Positive Community Transition Program Recommendation	159	1.248	.218	32.796	.000	3.483
Positive Treatment Team Recommendation	219	.888	.261	11.470	.001	2.431

Risk assessment data had less of an effect on discharge decisions than did the opinions of colleagues, with positive colleague consensus having the strongest effect. When positive community transition program or treatment team recommendations were presented, clinicians were more likely to recommend discharge. In other words, clinicians heed the opinions of their colleagues, particularly when they were favorable. In terms of risk assessment data, having no data or high-risk data was a significant predictor of a recommendation not to discharge. Not

only did clinicians utilize the actuarial risk assessment data, but they also were more sensitive to data that indicated a potential risk for danger.

Among the eight versions of the three independent variables included in the model, positive consensus from colleagues had the most predictive power. Clinicians who read a vignette with a positive recommendation from the community transition program were 3.5 times more likely to recommend discharge than when they read a vignette without such recommendation. The second strongest predictor of a favorable discharge decision was a positive recommendation by the treatment team, with clinicians who read such vignettes being 2.4 times more likely to offer a favorable recommendation than those who did not read such a vignette.

The lack of assessment data and high-risk assessment data were significant predictors of unfavorable discharge recommendations, with the lack of assessment data as a slightly stronger predictor of not recommending discharge. Clinicians who read vignettes with a lack of assessment data were 53% less likely to recommend discharge than those who did not read such vignettes. Similarly, those who read a high-risk assessment vignette were 78% less likely to recommend discharge than those who did not read such a vignette. The absence of actuarial data was a significant deterrent to recommending discharge just as when the data indicated a high risk. When clinical information is lacking, clinicians err on the side of caution and recommend against discharge.

Finally, the variables were analyzed for potential interaction effects through logistic regression. The presence of a significant interaction indicates that the effect of one predictor variable on the response variable is different, depending on the values of another predictor

variable. Although the main effects of the model were significant, none of the predictor variables had significant interaction effects.

### **Effect of Clinicians' Opinions and Experiences on Discharge Recommendations**

In addition to the predictor variables, risk assessment data and colleague consensus, mediating variables also affect discharge recommendations. Mediating variables are intervening variables that affect the relationship between two other variables. The mediating variables in this study, which were developed based on the literature and the theoretical framework, were clinicians' opinions on and experiences with making discharge decisions as well as their thoughts about mental illness and insanity acquittees.

The variables were placed into five categories: clinical impressions, opinions on actuarial methods, risks and personal responsibility, attitudes on mental illness and violence, and demographic and professional characteristics.

#### **Clinical Impressions of Discharge Readiness**

When making discharge decisions, clinicians rely on their clinical impressions and past experiences. Research has consistently indicated that most discharge decisions are based on clinical impressions, which are considered to be loose in structure and to have little consistency and no scientific rigor (Elbogen, 2002; Elbogen et al., 2002; Hilton & Simmons, 2001; Jaworowski & Guneva, 2002; Kennedy et al., 2007; Manguno-Mire et al., 2007; McDermott et al., 2009). The majority (72%) of clinicians in this study felt that a lack of clinical information makes discharge decisions difficult, and most (71%) felt that a checklist to guide the discharge process would be useful. Nevertheless, at Patton, most discharge decisions are rendered on the basis of clinical impressions and guided by the acquittees' discharge criteria.

As noted earlier, the discharge criteria are a list of treatment goals that highlight areas to be addressed prior to discharge. They are standardized and focus on six areas that include medication adherence, understanding of mental illness, commitment to recovery and sobriety, understanding of the crime, creation of a relapse prevention plan, and commitment to safety and to the community transition program's rules.

Although discharge criteria are the standard for discharge decisions at Patton, this study sought to determine whether clinicians actually rely on them. When presented with the statement, "I relied on Mr. Smith's discharge criteria as a guide for making his discharge recommendations," most (82%) clinicians stated that they utilized discharge criteria to gauge discharge readiness. All of the discharge criteria were identified as moderately to extremely important to identifying discharge readiness. In particular, the sample identified the following discharge criteria as moderately to extremely important: takes medication (88%), understands substance abuse (87%), uses coping skills (87%), understands how substance abuse and mental illness can lead to future violence (85%), understands diagnosis (84%), understands the association between substance abuse and mental illness (83%), follows rules (83%), accepts the community transition program's rules (83%), creates a relapse prevention plan (76%), and attends treatment (62%).

The effect of acquittee characteristics, such as the nature of the crime or length of hospitalization, were also analyzed. When presented with the statement, "The crime Mr. Smith committed in his instant offense strongly affected my discharge recommendation," most (68%) clinicians agreed. When presented with the statement "The number of years that Mr. Smith spent hospitalized strongly affected my discharge recommendation" clinicians were split about

evenly, with half in agreement and half in disagreement that the length of stay hospitalized influenced their discharge decisions.

As noted, opinions of colleagues affect discharge recommendations. Although opinions likely vary, Patton clinicians felt that members of treatment teams agreed on discharge decisions. Most respondents indicated that the treatment team often/always agrees on discharge decisions (65%), while the community transition program only often/always agrees (44%). Clinicians were asked to rate their agreement with the following statements, “The discharge recommendation made by the other members of my treatment team strongly impacts my own decision” and “The discharge recommendation made by community transition program strongly impacts my own decision.” Most clinicians agreed that the decisions of colleagues affect their own, with slightly more indicating that the treatment team has a stronger impact on their decisions (68%) than does the community transition program (60%).

Finally, clinicians were asked a series of questions to gauge their understanding of discharge trends at Patton. Despite their employment at Patton, it was unclear how much they actually understood about discharges or how their perceptions (and potential misperceptions) might influence discharge decisions. Clinicians estimated that most insanity acquittees spend 11 years hospitalized and that about 38 are discharged per year. Hospital census data showed that these staff estimations were relatively accurate. Most acquittees are released within 5 to 10 years, and, in 2011, 44 insanity acquittees were discharged. As such, clinicians had a relatively accurate understanding of acquittee discharges.

### **Opinions on Actuarial Methods**

During the last 20 years, a substantial body of research has supported the use of actuarial tools, based on their capacity to advance clinical accuracy and risk prediction (Dawes et al.,

1989; Grove et al., 2000; Rogers, 2000). Despite such extensive literature, clinicians have their own strong opinions on the use and effectiveness of these tools. Clinicians were asked to rank their level of agreement on a 6-point Likert scale (1 = strongly disagree, 2 = somewhat disagree, 3 = disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree) to a series of statements about risks and personal responsibility. The statements included, “I strongly prefer to rely on my own clinical impressions rather than on structured risk assessments when making discharge recommendations” and “Clinical decisions on discharge readiness are inaccurate if made without structured risk assessments.” Clinicians were split in their opinion and use of such tools. Most (57%) clinicians agreed that discharge decisions made without risk assessments are inaccurate, yet over half (54%) strongly preferred to rely on their own clinical abilities rather than on structured assessments. Although they may not always rely on risk assessment data in their decisions, clinicians appreciate the information provided, as most (78%) identified risk assessments as very helpful to their discharge decisions. About half 49% of clinicians indicated that risk assessments are conducted on acquirtees “occasionally” while only 27% indicated that they are conducted “often” to aid in discharge recommendations. Finally, only 15% of the clinicians strongly agreed or agreed that they felt confident in conducting risk assessments themselves.

### **Risks and Personal Responsibility**

In making discharge recommendations, clinicians must weigh the risks to the acquirtee and to society. Clinicians were asked to rank their agreement, using a 6-point Likert scale (1 = strongly disagree, 2 = somewhat disagree, 3 = disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree), to a series of statements about risks and personal responsibility. The various factors that clinicians take into consideration make the decision-making complex. In making

discharge decisions, the clinicians in this sample felt that they make accurate decisions, about which they are rarely uncertain. When presented with the statement, “I frequently make discharge readiness determinations even when I am uncertain,” most (82%) clinicians disagreed. Most (75%) also believed that making a discharge decision based on the vignettes that they received was easy. Clinicians also were asked, “Do you think you make correct discharge recommendations,” to which nearly three-quarters (71%) indicated that they make correct discharge decisions “often” in their work at Patton.

Clinicians face a variety of potential risks when making discharge decisions, including the possibility of their decision’s leading to negative outcomes for the acquittee or society. Clinicians were asked to rank, on a 5-point Likert scale (1 = never, 2 = rarely, 3 = occasionally, 4 = often, and 5 = always), the extent of certain concerns when making discharge decisions. In this regard, they were asked to respond to statements such as, “Do you worry about the possibility of the acquittee reoffending or acting out violently after discharge” and “Do you worry about the possibility of the acquittee psychiatrically decompensating after discharge?”

Clinicians were concerned for the health and safety of the acquittee post-discharge. The majority (75%) of clinicians “occasionally” or “often” worried about the patient’s reoffending or acting violently as well as psychiatrically decompensating (77%). Of all the possible risks, clinicians were most concerned with the acquittee’s facing harm from himself (i.e., self-inflicted harm or suicide) or others after being discharged to the community (86%). Liability issues or the possibility of being held legally accountable for an incorrect decision were considerably less of a concern, with most (68%) “occasionally” to “rarely” worrying.

The risk of making an incorrect decision that leads to an acquittee’s being dismissed from the community transition program is a likely concern. At the community transition program, to

maintain their placement, acquittees are expected to adhere to a set of highly specific rules.

Violating these rules has the potential to lead to revocation and return to Patton. Patton estimates that approximately 50% of acquittees who are discharged are revoked per year. Almost three-quarters (71%) of clinicians worried about patients' being revoked after being discharged from Patton, and 96% of the sample recognized that insanity acquittees "occasionally" or "often" are revoked from the community transition program.

The safety of the acquittee is not the only concern for clinicians. They also must take into consideration the public's safety. Most clinicians tended to feel more responsible for the public's safety than for that of the acquittee. Specifically, 84% of clinicians worried more about the public's safety than for the acquittee, and 70% felt that their primary responsibility was to the public rather than to the acquittee.

### **Attitudes on Mental Illness and Violence**

Clinicians' opinions on mental illness, crime, and personal responsibility also play a role in discharge decisions. Clinicians were asked to rank their agreement to a series of statements on these opinions, using a 6-point Likert scale (1 = strongly disagree, 2 = somewhat disagree, 3 = disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree). Clinicians read statements such as the following, "Most insanity acquittees commit their crimes primarily because of their mental illness" and "Insanity acquittees can be rehabilitated with treatment in state hospitals."

Most clinicians recognized the role that mental illness played in the acquittees' violent behaviors and criminal activities. In regard to violence and mental illness, the respondents felt that acquittees committed their crimes due to mental illness (61%), mental illness is a major cause of violence (81%), and most acquittees could not have controlled their behavior at the time of the offense (81%). A large majority (91%) believed that treatment and rehabilitation is



possible for insanity acquittees. The clinicians felt that acquittees should be held accountable for their crimes (64%), should be held accountable to the legal system for criminal activity (66%), and receive appropriate punishment for their crimes (76%). Nevertheless, most (68%) did not believe that acquittees are discharged on a timely basis.

### **Opinions and Experiences as Mediators of Discharge Decisions**

To determine how these mediating variables affected the relationship between the independent and dependent variables, Baron and Kenny's (1986) four steps for establishing mediation were used. According to Baron and Kenny, for a variable to be considered a possible mediator, (a) the predictor variable (risk data and/or colleague consensus) must be significantly correlated with the outcome variable (discharge decision); (b) the predictor variable (risk data and/or colleague consensus) must then be significantly correlated with the mediator variable (beliefs and characteristics); (c) the mediator variable must affect the outcome variable, and (d), for complete mediation, the effect of the independent variable on the dependent variable, controlling for the mediating variable, should be zero. These relationships were presented in Figure 1.

Pearson correlations were used to identify the correlations between the variables for steps 1 and 2. As noted, among the predictor variables, only three were significantly associated with discharge decisions: high-risk assessment ( $r = -.266, p = .000$ ), positive community transition program ( $r = .222, p = .000$ ), and positive treatment team recommendation ( $r = .240, p = .000$ ).

In step 2, correlations were then run between these three predictor variables and all mediating variables. The results indicated that a high-risk assessment was not significantly correlated with any of the mediating variables; however, favorable recommendations from the community transition program were positively associated with confidence in conducting a risk

assessment ( $r = .142, p = .003$ ) and negatively associated with a lack of useful clinical information as a barrier to discharge decisions ( $r = -.101, p = .036$ ). Additionally, favorable recommendations from the treatment team were positively associated with a lack of useful clinical information as a barrier to making discharge decisions ( $r = .034, p = -.102$ ).

In step 3, logistic regressions were used to show how the mediators, confidence in conducting a risk assessment, and a lack of useful clinical information as a barrier to discharge decisions, affected discharge decision when the independent variable was controlled. In particular, the analysis concerned how the significantly-correlated mediating variables (i.e., feeling very confident about conducting a risk assessment and feeling that a lack of useful clinical information was a barrier to making discharge decisions) may have influenced discharge decision while controlling for the effect of a positive treatment team and community transition program recommendation. The results indicated that confidence in completing a risk assessment significantly affected discharge recommendation ( $p = .006$ ). In addition, a lack of useful information significantly affected discharge recommendation when controlling for a positive community transition program recommendation ( $p = .000$ ) and a positive treatment team recommendation ( $p = .000$ ).

Although all three mediating variables affected the dependent variable, complete mediation requires that the effect of the independent variable on the dependent variable, or path  $c'$ , equal zero when controlling for the possible mediators. The results indicated that complete mediation was not identified among the variables. When controlling for feeling confident about conducting a risk assessment, the relationship between a positive community transition program report and discharge decision was  $c' = 1.076$ . When controlling for feeling that a lack of information was a barrier to discharge recommendations, the relationship between a positive

community transition program recommendation and discharge recommendation was  $c' = 1.096$ . Finally, when controlling for feeling that a lack of information was a barrier to discharge recommendations, the relationship between positive treatment team recommendation and discharge recommendation was  $c' = .923$ .

Despite the lack of complete mediation, in step 4, Sobel tests were conducted on the three possible significant mediating variables to identify whether they carried partial mediation from the independent to the dependent variable (Sobel, 1982). The relationship between positive community transition program report and discharge decision was partially mediated by feeling confident about conducting a risk assessment ( $Sobel = 1.942, p = .052, c' = 1.076$ ). The other possible mediator, feeling that a lack of useful clinical information was a barrier to making discharge decisions, did not partially mediate either the relationship between a positive treatment team recommendation ( $Sobel = 1.854, p = .064, c' = 1.096$ ) or a positive community transition recommendation ( $Sobel = 1.824, p = .07, c' = .923$ ) and clinician discharge recommendation. The results are presented in Table 4.

Table 4

*Mediating Effect of Feeling Confident Conducting a Risk Assessment on a Positive Recommendation from the Community Transition Program's Influence on Discharge Decision*

<b>Step</b>	<b>Path</b>	<b>Estimate</b>	<b>Beta</b>	<b>p</b>
1	a	.105	.384	.006
2	b	.148	.194	.006
3	c	.297	1.130	.000
4	c'	.281	1.076	.052

## Summary

In summary, among the eight versions of the three independent variables included in the model, the absence of assessment and high-risk assessment data were significant predictors of a negative discharge recommendation, while a favorable community transition program and treatment team consensus were significant predictors of a positive discharge recommendation. A positive recommendation from the community transition program was the strongest predictor variable overall. Most clinicians felt moderately to very confident in their discharge decisions regardless of the vignette conditions presented. When looking at the mediating effects of clinicians' opinions and experiences, none of the possible mediating variables provided complete mediation between the predictor variables and discharge decision. The relationship between positive community transition program report and discharge decision was however, partially mediated by feeling confident about conducting a risk assessment.

## CHAPTER 5

### DISCUSSION

Every five years, over 95,000 discharge decisions are made by clinicians in psychiatric institutions (Mahler et al., 2000). The decision to discharge is largely affected by a patient's assessed likelihood for future violence. In the last 10 years over 100 articles have promoted the value and use of risk assessments (McDermott et al., 2008; Rogers, 2000). Studies have consistently shown that a violence-risk prediction unaided by actuarial methods and reliant on clinical impressions is flawed (Bell & Mellor, 2009). Without actuarial tools, clinicians' ability to predict violence is no better than chance (Grondahl et al., 2009; Heilbrun & Witte, 1999; Hilton & Simmons, 2001; McDermott et al., 2008).

Despite the growing body of research that supports the use of actuarial methods, they are seldom used in forensic settings (Elbogen, 2002; Odeh et al., 2006). Instead, clinicians rely on their clinical observations, staff documentation, and reports from collateral contacts such as the treatment team and the community transition programs. Further, in general, clinicians are unfamiliar with conducting risk assessments (Elbogen, 2002; McDermott et al., 2008; Odeh et al., 2006). While the lack of risk assessment use in real-world clinical settings is recognized, whether clinicians would rely on the data when present is less known. Few published studies have looked at how discharge decisions for insanity acquittees are made or how risk assessment data is used when available (Linhorst et al., 2000; Stubner et al., 2006).

At Patton, the nation's largest forensic state hospital, all patients have a history of mental illness and violence (Lareau, 2007). On a monthly basis, forensic clinicians face the difficult task of judging discharge readiness as they evaluate these patients for risk of danger to their own and to the community's health and safety. At Patton, like many other forensic hospitals, the

types of available clinical information used for discharge decisions are not standardized, and the utilization of actuarial risk assessments is not required. Only 27% of clinicians in this sample felt that formal risk assessment tools were “often” conducted to aid in discharge recommendations. Further, only 15% felt confident in their ability to conduct formal actuarial risk assessments themselves.

Because risk assessment data are not a typical part of patient evaluations, most Patton clinicians are unfamiliar with these assessments and lack confidence in their employment. At Patton only a handful of psychologists and psychiatrists are educated in their use, and most of those familiar with them do not complete or use them regularly. Instead, risk assessments are usually conducted by a small group of forensic specialists and only upon the specific request of the treatment team. With such limited resources, most acquittees are not evaluated and those who are can wait years before a risk assessment is completed.

Because it is difficult to accurately predict preparedness for community living, forensic clinicians often make discharge recommendations even when they are uncertain of the potential consequences (Miller et al., 2000). In this regard, the cost of making an inaccurate decision in favor of discharge is substantially higher when the health and safety of the acquittee and community may be at risk (Kahneman & Tversky, 1979; Tversky & Fox, 1995). As a matter of fact, as a result of the unavoidable uncertainties of the decision making process, approximately 50% of those discharged are returned to Patton.

Contrary to the literature that indicates that clinicians prefer their clinical impressions over actuarial data, the clinicians who participated in this experiment utilized risk assessment information in making their discharge decisions. In particular, those presented with data that suggested high risk were more likely to recommend against discharge. In addition, the absence

of risk assessment data was also a significant predictor against discharge. When risk assessment data suggested only a low risk for future violence, the data were not significantly related to discharge decisions.

Risk assessment information that indicates a high-risk for future violence influenced clinicians more than did low-risk data. Clinicians who read a vignette with high-risk assessment data were 2.2 times more likely to recommend against discharge. While weighing risks and advantages, individuals will give more weight to the risks (Kahneman & Tversky, 1979; Tversky & Fox, 1995). In this study, it is likely that clinicians did not favor discharge to minimize the hazards of their discharge recommendations. Further, since at this state hospital formal risk assessments are seldom requested unless staff think that the acquirtees may be of high risk, there may be the presumption that if risk assessment data is available the patient is probably a high risk. Risk assessment data for those who may be judged as low risk may not be requested and, therefore will not be available to support a recommendation for release.

Further, because risk assessments are so seldom completed, referrals tend to be given only to acquirtees who present with high risk characteristics rather than to support those who may be low risk and ready for release.

Despite the importance of high-risk assessment data on this sample, clinicians must often render discharge decisions devoid of it in their practice at Patton. Most clinicians (72%) agreed that a lack of useful information, such as risk assessment data, made the discharge decision difficult. Without such useful information, clinicians rely on their clinical impressions on dangerousness, which have been shown to be unreliable (Bell & Mellor, 2009). In this study, clinicians who were not provided risk assessment information were significantly more likely to

decide against discharge. This outcome points to clinicians' trust in risk assessment data and the need for the provision of such valuable information in the discharge process.

According to the literature, risk assessments are considered the most valuable, dependable, and scientifically supported form of information available for violence risk prediction (Bell & Mellor, 2009; Dawes et al., 1989; Garb, 2005; Kennedy et al., 2007; McDermott & Thompson, 2006). Risk assessments make discharge decisions more standardized and rigorous by basing them on empirical justification (Stubner et al., 2006). They work to decrease recidivism and to increase the equitable treatment of insanity acquittees as well as public safety (Hilton & Simmons, 2001). The absence of structured risk assessments at Patton not only makes decisions less accurate but also may be dissuading clinicians from recommending acquittee discharges.

That the lack of risk assessment data was a strong predictor of unfavorable discharge indicates that Patton might be delaying acquittees' reintegration into society by failing to provide such data to clinicians. Research has shown that acquittees spend more time hospitalized in locked state psychiatric institutions than do most individuals in prison for similar crimes, particularly in California (Callahan & Silver, 1998). Not only does the extended length of stay have fiduciary implications, with each year of state hospital treatment's costing over \$100,000, but also ethical implications because the acquittee is detained beyond his treatment needs. When risk assessment data were not present, clinicians did not recommend discharge as often, which potentially delayed the release of the acquittee. Conducting risk assessments for only certain acquittees creates an inequality in terms of providing fair treatment and evaluations for discharge readiness. There is a need for the consistent use of actuarial tools to standardize the discharge



process and to provide clinicians with the information that they value and will utilize in making discharge decisions.

Although risk assessment data affected discharge decisions, it was less influential than were the opinions of colleagues. The positive opinions of the treatment team and community transition program were significant predictors for favorable discharge decisions by clinicians. At Patton, which treats over 1,500 patients, discharge is rare, at an average of 38 acquittees per year. An acquittee discharge is contingent on the agreement of the majority of stakeholders, which may be why the positive opinions of colleagues were influential to clinicians.

According to prospect theory, decisions are made based on the value of the possible outcomes (Kahneman & Tversky, 1979). Prospect theory indicates that individuals place considerable value on certainty in decisions and are more likely to gamble on decisions with certain outcomes, regardless of the reward. Further, the competence hypothesis posits that individuals prefer to bet on opinions about which they feel the most knowledgeable (Tversky & Fox, 1995) and will gather as much information as possible before making a decision. In making discharge decisions, clinicians gathered the information provided by colleagues and used it in their own decisions, which was seen particularly when the decision was favorable.

Colleague opinions in favor of discharge provided clinicians with the certainty needed to make a positive discharge recommendation. Further, colleague consensus may have been significantly more important due to the lack of useful clinical information and risk assessments reported by clinicians in this sample. When weighing the risks and benefits of rendering a positive discharge recommendation, the positive recommendations of the treatment team and community transition program likely reduced the perception of risk and influenced clinicians to render positive discharge decisions themselves.

Among the stakeholders involved in the discharge process at Patton is the interdisciplinary treatment team. The treatment team is a unit-based group of clinicians who prepare acquittees for release as well as evaluate discharge readiness. Discharge determinations are made monthly in conferences in which treatment team members, along with the acquittee, evaluate progress toward discharge. During this time, the documentation in the chart is reviewed and clinicians discuss their thoughts about and observations on the acquittee. Most clinicians indicated that their treatment team generally agrees on discharge decisions.

The positive recommendation of the treatment team significantly predicted the likelihood of clinicians' favorable discharge decisions. At Patton, disagreements on discharge readiness do occur among treatment teams, but, typically, the majority wins. Despite any potential disparities, a group decision must be made and a legal progress report on the treatment team's decision submitted to the court. Thus, clinicians need to work collectively with their team to determine a group discharge recommendation. Given the joint nature of the decision, clinicians heeded the recommendations of their treatment team.

Aside from the treatment team, the county-based community transition program also provides evaluations of each acquittees' discharge readiness. The community transition programs' positive opinion was the strongest predictor for a favorable discharge recommendation and the single strongest predictor variable overall. The majority of the sample, however, felt that the community transition program only sometimes agrees with their treatment team's decision. In reality, the community transition program often disagrees with the treatment team's recommendation, particularly when the team is in favor of discharge.

The community transition program evaluates acquittees for discharge readiness for approximately an hour twice per year. Given that these evaluations are infrequent and not

intensive, paired with the fact that the program remains legally responsible for the acquittee once released, evaluations rarely support discharge. When disagreement occurs between the community transition program and the treatment team, a judge makes the final discharge decision. Judges generally decide in favor of the most conservative recommendation. Thus, favorable recommendations by the community transition team might signify that an acquittee has a good chance for discharge and thus influence clinicians toward their own favorable discharge decisions.

That clinicians relied more on the input of their colleagues is expected in view of the fact that risk assessment data are generally not available. In day-to-day practice, the opinions of both the treatment team and community transition program are consistently present, making it a more available source of information. Whether or not a risk assessment is present, clinicians always can rely on the input of colleagues via documentation in the chart or conferencing on an acquittee. The problem with this is the clinicians' reliance on the clinical impressions of others rather than on standardized actuarial assessments as the only source of information. Despite the power and influence of colleagues' discharge decisions, this information is less reliable than structured risk assessment data and can potentially lead to flawed discharge decisions.

Clinicians in this sample were confident in their discharge decisions. There was no significant variation of confidence by vignette, and most (67%) clinicians felt "moderately" to "very confident" in their ability to render accurate discharge decisions. Research has shown that clinicians often feel overly confident in their clinical abilities, despite the fact that they are flawed (McNeil et al., 1998). Additionally, risk prediction that relies on clinical impressions and not actuarial data has its detractors, who feel that clinical impressions do not lead to a decision that is better than chance (McDermott & Thompson, 2006; Steadman, 1983).

Patton clinicians are confident in their abilities, feel that that they often make accurate discharge decisions and rarely feel uncertain in their determinations. Yet, half of the decisions made in favor of discharge result in the acquittee later being re-hospitalized. Regardless of discipline or years of education, clinicians were generally confident. The psychiatric technicians, who are the majority of clinicians at Patton and in this sample, have only a 2 year post high school education and limited knowledge of risk assessments. Nevertheless, they too felt confident in making these momentous decisions. These institutionally based trends are likely the result of the unique culture that emerges in many large organizations like Patton.

Within Patton's barbed wire fences exists a culture and social climate among both its patients but its staff. According to Hundert's value systems theory, decisions are made based on one's value systems. At Patton, there was little variation in the values and opinions of clinicians in this sample. Perhaps there is a selection effect among staff, in which clinicians who share homogenous views find it appealing to work in a maximum security psychiatric hospital. Clinicians held similar beliefs on clinical impressions, confidence and risks, values and ethics, opinions on actuarial methods and sense of personal responsibility. It is likely that working in a maximum security psychiatric hospital may appeal to certain clinicians who share homogeneous views. This social climate may contribute to the sense of confidence and the influence of the suggestion effect of colleagues' opinions in discharge decision making. This social climate may contribute to the sense of confidence and the influence of the suggestion effect of colleagues' opinions in discharge decision making. Patton clinicians align their views with the staff group and mentality, being influenced by their peers towards discharge decisions and feeling more confident than they ought to.

Clinician confidence however, is misplaced, as the current rate of accurate discharges is no better than chance at about 50%. Despite their tendency towards confidence in discharge decisions, clinicians recognized that many acquittees are revoked from community placement. Perhaps they view revocation as a natural part of discharged acquittees' experiences. This over confidence may also be due to clinicians not being regularly provided with information on the outcome and accuracy of their own discharge decisions. Once discharged, clinicians are not informed of their patients' experiences in the community. Without any post-discharge knowledge of the acquittees successes or failures, clinicians are left in the dark as to whether their discharge decisions were correct. Forensic hospitals might improve discharge accuracy by providing clinicians with post-release feedback, enabling them to learn from their discharge decisions.

Future studies might begin to analyze Patton's cultural environment and those shared values that impact discharge decisions. Because so much of the discharge decision making is a group process, it is vital to understand how these complicated group choices are being made. Further, a cost benefit analysis of the current method of discharging acquittees may also be in order, allowing for improved decisions to be made with the least hospital and community costs.

This study has several limitations. The respondents were drawn from only one of California's state hospitals, which limited the generalizability of the findings to other state hospital settings and states. As noted, the insanity acquittee statute and discharge process differs significantly across states. Despite this limitation, because Patton is the largest forensic state hospital in the United States and houses over 1,500 patients of diverse backgrounds, it is likely representative of other state hospitals.

A second limitation is the inherent complexity of clinical decision making amongst a variety of stakeholders. The final decision to discharge acquittees involves the judgments of a

variety of stakeholders. Although the ultimate decision is determined by the group through consensus and majority vote, if needed, it begins at the individual clinical level. All individual clinical decisions are pooled together via discussion for the final group decision, and each clinician's personal decision is vital to the ultimate recommendation. This study provided elements of the group decision via the treatment team and community transition program's recommendation, but focused on the individual discharge decision. Because of the complicated nature of decision making, this study did not seek to understand the group discharge decision by the treatment team but rather the individual one. An understanding of the individual discharge decision will provide the basis for research on the group decision process, which may be more complex than that of the individual decision process.

One final limitation is the use of a static case description as the basis for making a discharge decision. The short vignette did not include the realistic interactions and experiences that clinicians have with their patients and that affect discharge decisions. To address this, however, the vignette mirrored the common Patton acquittee demographic, clinical, and criminal characteristics, as indicated by prior research (Muheizen, 2009). This allowed the contents of the vignette to align as closely as possible to the characteristics of an actual acquittee and discharge situation. This vignette also was presented in a format similar to those reviewed in clinical meetings at Patton and was pilot tested for realism with a treatment team. To provide findings that may be more generalizable, future research could involve the observation of *in vivo* discharge conferences of actual cases.

Despite these limitations, the results of the study addressed the research questions. Specifically, the results showed that high-risk assessment and the lack of assessment data influenced clinicians' decisions against discharge and that positive recommendations from the

treatment team and the community transition program influenced clinicians in making recommendations for discharge. With 50% of discharged acquittees' being readmitted and some, such as Mr. Robinson, acting out in violence, Patton, the acquittees it serves, and the community it protects can benefit from more well-informed and accurate discharge decisions.

Among the most difficult decisions made by mental health professionals is the decision to discharge a mentally disordered violent offender from a secure psychiatric hospital. These decisions are important ones with potentially high risks to many. A faulty decision in favor of discharge may have significant safety implications, while a faulty decision against discharge has significant fiscal ones with over \$100,000 being spent on each hospitalized acquittee per year. These uncertain and difficult decisions have the potential to not only impact the health and safety of the community at large, but also the individual lives of us all. Risk assessments however, can lessen the difficulty. At Patton, risk assessment data are not available for each acquittee, and only a handful of forensic specialists complete such evaluations. Without risk assessments being consistently conducted, clinicians are left relying on colleague opinions, which are not anchored in actuarial data.

Clinicians in this sample were swayed more by the group decision than by their own values or the data presented by these scientifically supported tools. Despite this, most clinicians felt that a lack of clinical information made discharge decisions difficult and that discharge decisions made without risk assessments are inaccurate. Clinicians recognized the helpfulness of risk assessments but they are not being given this information and are not familiar with their use. A better understanding of risk assessments will improve discharge accuracy and an appreciation of post-discharge feedback. It is impossible to correct a mistake without knowing that one has

been made. Routine and systematic feedback about the outcome of discharges will likely improve discharge accuracy as well.

That these complicated and important discharge decisions are being made with such high levels of clinician confidence is alarming. To render such decisions without the optimum information needed to make well informed choices is negligent. Although risk assessments are often viewed as costly, the cost of making incorrect discharge decisions, as shown by the case of Mr. Robinson and individuals like him, is much higher. Risk assessments provide necessary data and should be completed regularly for each acquittee. The consistent use of assessments will create a more dependable and equitable method for review, will enhance fairness and accuracy in discharge determination, and will serve and protect both the acquittee and the community.



## APPENDIX A

### VIGNETTE

Please read the following brief vignette and answer the questions that follow.

#### Case #1

Today you are meeting with your treatment team for Mr. Smith's quarterly conference. Mr. Smith is single, white, and 31 years old. He was committed to Patton State Hospital as a PC 1026 after having been found not guilty by reason of insanity. His committing offense is a violation of PC 245(a)(1), assault with a deadly weapon with great bodily injury. This is his first admission to Patton. He has not graduated from high school, and he was unemployed prior to his admission. His current Axis I diagnosis is schizophrenia, paranoid type, and his GAF is 35.

Mr. Smith has been receiving treatment at Patton State Hospital for a little over three years. He takes his medication as prescribed and attends mall treatment consistently, for which he participates actively. He has not engaged in any violent behavior or rule violations over the last year. He has completed a viable WRAP for use upon discharge. During his last conference, the team identified that Mr. Smith has met most of his discharge criteria. < Mr. Smith was given a forensic risk evaluation, which concluded that he represents a low/high risk for future violence. > < Mr. Smith's last evaluation by the community transition program was completed last month and indicated that he no longer/continues to represents substantial danger to the health and safety of others and that he is a suitable/unsuitable candidate for discharge. > < During the conference, other members of your treatment team recommended/did not recommend discharge/were mixed [about discharge].

1) Given this set of circumstances, please indicate whether you personally would recommend Mr. Smith for discharge.

Yes

No

2) Please indicate how confident you are in your discharge recommendation for Mr. Smith?

Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Extremely confident
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3) In terms of discharge readiness for Mr. Smith, please rate the level of importance of the following set of discharge criteria in making your recommendation.

(1 = Extremely unimportant    2 = Moderately unimportant    3 = Slightly unimportant  
 4 = Slightly important        5 = Moderately important        6 = Extremely important)

- 1 2 3 4 5 6 Takes medications voluntarily as prescribed and is able to identify how medication works.
- 1 2 3 4 5 6 Is able to describe the symptoms of his diagnosis.
- 1 2 3 4 5 6 Attends 90% of mall groups and actively participates.
- 1 2 3 4 5 6 Follows unit rules and routines.
- 1 2 3 4 5 6 Understands how substance abuse has negatively affected his life and has completed a substance abuse WRAP.
- 1 2 3 4 5 6 Is able to describe how mental illness and alcohol/drug abuse are associated with criminal activities and violence.
- 1 2 3 4 5 6 Is able to describe how mental illness and potential substance abuse could lead to future acts of violence.
- 1 2 3 4 5 6 Is able to describe his Wellness Recovery Action Plan.
- 1 2 3 4 5 6 Is able to use his positive coping strategies to prevent himself from being aggressive toward others or harming himself.
- 1 2 3 4 5 6 Accepts the supervision provided by community transition program as indicated by his willingness to sign the Terms & Conditions of Outpatient Treatment.

4) Please list any factors not present in the discharge criteria above that you would use in determining discharge readiness for Mr. Smith.

---

### Discharge Factors for Mr. Smith

Thinking about Mr. Smith's case, please indicate the extent to which you agree with the following statements.

5) Making Mr. Smith's discharge recommendation was very easy to me.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

6) I relied on Mr. Smith's discharge criteria as a guide for making his discharge recommendations.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

7) The crime that Mr. Smith committed in his instant offense strongly affected my discharge recommendation.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

8) The number of years that Mr. Smith spent hospitalized strongly affected my discharge recommendation.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

9) I felt conflicted about making Mr. Smith's discharge readiness determination.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

10) I feel that my primary responsibility is to Mr. Smith rather than to the public in making his discharge recommendation.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

11) It would be very helpful to me to have a specific checklist available for determining Mr. Smith's discharge readiness.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

12) A lack of useful clinical information was a barrier to making Mr. Smith's discharge readiness decision.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
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### General Discharge Decisions

In regard to your personal experience, please indicate the extent to which you agree with the following statements about making discharge recommendations for insanity acquittees at Patton.

13) Most acquittees at Patton are discharged on a timely basis.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

14) I frequently face conflicts between my legal, ethical, and clinical values when making discharge readiness determinations.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
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15) I often worry about the potential risks to the acquittee if I make an incorrect discharge recommendation.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

16) I often worry about the potential risks to society if I make an incorrect discharge recommendation.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

17) I frequently make discharge readiness determinations even when I am uncertain.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

18) Clinical decisions on discharge readiness are inaccurate if made without structured risk assessments.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

19) I strongly prefer to rely on my own clinical impressions rather than on structured risk assessments when making discharge recommendations.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

20) Input from a formal risk assessment (i.e., VRAG) is very helpful to me in determining discharge readiness.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

21) I am very confident in my ability to conduct a formal risk assessment such as the VRAG.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

22) The discharge recommendation made by the other members of my treatment team strongly affects my own decision.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

23) The discharge recommendation made by the community transition program strongly affects my own decision.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

## Personal Responsibility

Please indicate the extent to which you agree with the following statements about insanity acquittees at Patton.

24) Insanity acquittees can be rehabilitated with treatment in state hospitals.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

25) Most insanity acquittees commit their crimes primarily because of their mental illness.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

26) I think that insanity acquittees should be held accountable by the legal system for their crimes.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

27) Currently, in my opinion, I don't think that insanity acquittees are adequately held accountable by the legal system for their crimes.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

28) Insanity acquittees receive too much punishment for their crimes.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

29) In most cases, the insanity acquittee could have controlled his actions during the instant offense.

---

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------



30) Mental illness is one of the major causes of acquittee violence.

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Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
----------------------	----------	----------------------	-------------------	-------	-------------------

## The Typical Discharge Determination Process

In your personal experience with making discharge recommendations for insanity acquittees at Patton, how often do the following events occur?

31) Do you think you make correct discharge recommendations?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

32) Do you think discharged acquittees later get revoked from the community transition program?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

33) How often are formal risk assessments (i.e., VRAG) conducted on acquittees to aid in discharge decisions?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

34) Do all of the members of your treatment team agree on discharge readiness?

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Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

35) Do your interdisciplinary team and the community transition program agree on discharge readiness?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

36) Do you worry about the possibility of the acquittee's reoffending or acting out violently after discharge?

---

Never	Rarely	Occasionally	Often	Always
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37) Do you worry about the possibility of the acquittee's psychiatrically decompensating after discharge?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

38) Do you worry about being held liable for making an inaccurate discharge decision?

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Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

39) Do you worry about the possibility of the acquittee's being revoked from the community transition program after discharge?

---

Never	Rarely	Occasionally	Often	Always
-------	--------	--------------	-------	--------

40) Do you worry about the possibility of the acquittee's facing harm from himself or others in the community after discharge?

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Never	Rarely	Occasionally	Often	Always
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## Discharge Trends

Please answer the following questions about your general experiences with insanity acquittees (PC 1026) at Patton only.

41) How many insanity acquittees would you guess are discharged from Patton each year? \_\_\_\_\_

42) What is your guess about the average number of years that most acquittees are hospitalized at Patton? \_\_\_\_\_

Please provide the following information about yourself:

What is your gender?      Male      Female

What is your age?

What is your ethnicity?

What is your professional discipline: \_\_\_\_\_

How many years working have you been working at Patton? \_\_\_\_\_

How many years of experience do you have in your professional field? \_\_\_\_\_

Thank you for your participation!

## **APPENDIX B**

### **INTRODUCTORY EMAIL**

Dear Colleague:

My name is Jaclyn Muheizen. I am a social worker (LCSW) here at Patton State Hospital (PSH), and I am currently working on completing my Ph.D. in social welfare from UCLA. As part of my dissertation, I am seeking your assistance in completing an important and short web-based survey about your clinical opinions on discharge readiness determinations for insanity acquittees at PSH.

Making discharge decisions is complicated and consequential. I'm interested in how we, as professionals, make those decisions. Your answers are significant to advancing what we know about the discharge process and to best treating and releasing our individuals. In this study, I will ask you to read a brief description of a case and answer several questions about your professional impressions about readiness. There are no right or wrong answers.

In one week, you will be emailed a link to a website and an access code that will allow you to complete the survey. This is a short survey and should only take 10 minutes of your time. Upon completion of the survey, you can print out your thank-you page, include your name and extension, and send it to Jaclyn Muheizen, N-22, to be entered for a chance to win one of four \$50 Target gift cards.

After completing the survey, please do not share your experiences and/or answers with colleagues. When I complete the study, I will share the findings with you.

As an employee at Patton, I know that your time is valuable. I appreciate your support and assistance in my endeavor to learn more about our state hospital and the individuals we serve.

Thank you,

Jaclyn Muheizen, LCSW

## APPENDIX C

### INFORMED CONSENT

“Clinical Judgments about Readiness for Discharge”

#### Informed Consent Form

Welcome to the website for the study. Below, you will be provided with information about the study, which will help you to decide whether you wish to participate. If you agree to participate, please be aware that you are free to withdraw at any point during the brief survey, without any penalty. Your participation is encouraged but strictly voluntary.

This web-based survey focuses on state hospital clinicians’ opinions about discharge readiness for insanity acquittees (PC 1026). The study does not use any current or past patient information. The study uses a hypothetical case. Your name or unit will not be associated with any of the information you provide. Your access code was assigned to you randomly and is not associated with your name.

Your participation in this study will require approximately 10 minutes. There are no foreseen adverse affects to your participation. If, for any reason during this study, you do not feel comfortable, you may contact the principal investigator for more information or terminate your participation in the survey.

When this study is complete, a summary of the general findings will be presented to Patton State Hospital, but no individual data will be shared with anyone at any time. If you would like to have a copy of the results of the study, you may request them directly from me. If you have any further questions about this study, please feel free to contact me through telephone or email: (909) 425-6385 or [Jmuheize@psh.dmh.ca.gov](mailto:Jmuheize@psh.dmh.ca.gov).

By entering your access code on the website, you are indicating that you understand your rights and freely agree to participate in the study. Once you enter your code, you may begin and complete the survey in one sitting. You can take as much time as you need, but you will not be able to go back and change your answers or to sign off and return to the study at a later time.

Thank you for your participation.

## **APPENDIX D**

### **FOLLOW-UP EMAIL**

Dear Colleague:

I know you have been busy, but I wanted to remind you about participating in the brief survey for my dissertation study. Your answers and participation are very important to enhance the understanding of how we determine discharge readiness, and I cannot do this without you! There is still time for you to participate, and it will take only 10 minutes of your time.

Remember, upon completion of the survey, you can print out your thank-you page, include your name and extension, and send it to Jaclyn Muheizen, N-22, to be entered for a chance to win one of four \$50 Target gift cards!

As an employee at Patton, I know that your time is valuable. I appreciate your support and assistance in my endeavor to learn more about our state hospital and the individuals whom we serve.

Thank you,

Jaclyn Muheizen, LCSW



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