

Competency Restoration for Adult Defendants in Different Treatment Environments

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The optimization of trial competency restoration is a topic of growing interest and controversy in the fields of forensics, psychology, criminal law, and public policy. Research has established that adult defendants who have severe psychotic disorders and cognitive impairments are more likely than defendants without these conditions to be found incompetent to stand trial and are less likely to be restored to competency thereafter. Research has also identified some of the benefits of attempting restoration in hospitals, jails, or outpatient settings for defendants with different diagnoses or levels of cognitive functioning. Rates of restoration, length of stay necessary to achieve restoration, and, in some cases, how quickly defendants are found non-restorable are primary indicators of positive outcome. We sought to review the extant literature on competency restoration, with the goals of identifying implications for current practice and generating inquiries for future research. We found that there are significant advantages and disadvantages of attempting restoration in a hospital, jail, or outpatient setting on rates of restoration, length of stay necessary to achieve restoration, or length of time necessary to determine non-restorability, while controlling for several relevant factors (e.g., diagnosis, cognitive limitations).

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Since the early 1960s, requests for evaluations of competency to stand trial for adult criminal defendants have increased from approximately 25,000 to 36,000 annually to 50,000 to 60,000 in recent years.^{1–4} Competency is now the most common subject of a forensic evaluation.² Surveyed public defenders have reported concerns about competency in 10 to 15 percent of their cases, with competency to stand trial evaluations occurring in 2 to 8 percent of all felony cases.^{1,4} Given the frequency of evaluation requests, understanding the legal parameters and challenges related to competency determination and restoration is necessary for attorneys, judges, legislators, evaluators, and forensic mental health practitioners,

A pertinent history of this topic will first be reviewed to provide context for a critical review and discussion of the relevant psycholegal literature.

History

Challenges of trying mentally ill defendants date back to the medieval period.⁵ It has been reported that questions about competency may have first been raised in response to defendants who were mute and did not enter a plea of guilt or innocence.⁶ In those cases, courts used juries to determine whether the defendant was mute in an obstinate way, or whether “he be dumb *ex visitation Dei* (by visitation of God)” (Ref. 6, p 3). Defendants determined to be obstinate were subjected to *peine forte et dure*, a process of placing increasingly heavy rocks on top of them as a form of coercion.^{5,6} Defendants found to be mute *ex visitation Dei* were not subjected to *peine forte et dure* and (along with “idiots” and “lunatics”) were spared trial proceedings altogether.⁶ By the late 18th century, common law began to recognize that individuals needed to understand the charges against them and be at least somewhat capable of participating in their own defense.^{5,6}

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In the case of *Dusky v. United States* (1960), the U.S. Supreme Court established a Constitutional standard for competency applicable in all criminal cases at the federal or state level.⁷ Henceforth, individuals accused of crimes needed to possess a factual as well as a rational understanding of the legal circumstances at hand and to be capable of consulting rationally with their attorneys.⁴ In the years since this standard was established, the number of referrals for evaluation has increased significantly, in part reflecting increases in the number of criminal prosecutions.⁸

In the aftermath of *Dusky*, there were growing concerns about incompetent defendants being hospitalized for significantly longer periods of time than if they had gone through traditional criminal proceedings.^{7,8} Before the early 1970s, incompetent defendants could be hospitalized and receive more general forms of treatment, regardless of whether restoration was likely to occur.⁹

Deinstitutionalization in subsequent years resulted in fewer civil hospital beds being available.^{8,10} However, beds for incompetent defendants were not necessarily decreased and, in fact, were increased in some jurisdictions.¹¹

In 1972, the U.S. Supreme Court, in the landmark case of *Jackson v. Indiana*,¹² ruled that competency-related hospitalization required that restoration be likely to occur in the foreseeable future.³ Thereafter, states were incentivized to provide services tailored to competency restoration.^{3,8,13,14}

However, the *Jackson* ruling did not further specify or define the foreseeable future.^{5,9,14} As a result, subsequent state court interpretations of *Jackson* varied considerably, though led to shortened commitments in many cases and placement of some incompetent defendants in less restrictive settings.^{5,8,14} Many states now place limits on the maximum length of time an individual may be committed for restoration purposes and require termination of the proceedings when competence cannot be restored.¹⁴ Some states permit charges to be dropped and re-filed to get around statute-specified end dates, whereas other states allow commitments without predetermined end dates for individuals charged with murder and sex offenses. Still others grant indeterminate commitments (typically under procedures governing insanity acquittee commitments) for individuals found not likely to be restored in the near future and “factually guilty” of the offense(s) in question.¹⁵

Dusky and *Jackson* continue to have significant implications for current forensic practice.^{7,14} Whereas *Dusky* provides a legal definition of competency, *Jackson* clarifies the limitations of commitment.^{7,13,14} The *Dusky* standard requires a functional analysis of a defendant’s current capacities, so that deficiencies can be targeted for intervention in furtherance of restoration.^{5,7} Generally, when a defendant cannot be restored to competency, a *Jackson* hearing is called.^{5,14} Depending on the jurisdiction, if the individual is found non-restorable, he or she will be released from the competency restoration commitment, the charges may be dismissed (although this was not specifically required by *Jackson*), and civil commitment proceedings may be initiated.^{5,14}

Unfortunately, growing resource problems in some states have delayed defendants’ transitions from jail to hospital after a finding of incompetency (and commitment for restoration).^{16,17} As a result, defendants found incompetent to stand trial may spend considerable counterproductive time in jails awaiting the availability of a hospital bed.² In such cases, state governments may face civil action (e.g., contempt of court for delay in responding to a court’s commitment order).^{8,14,16,17} Within the following literature review are proposed strategies to redress such limitations of policy and practice, secondary to the larger aims as follows.

Prior Research

The purpose of this article is to substantially review the extant research on competency restoration, identify implications for current practice, and generate inquiries for future research. Historically, research has been focused more on evaluation than on restoration.² Well summarized by Pirelli *et al.*,¹⁸ a majority of restoration research focused largely on identifying the common factors among competent/incompetent and restorable/non-restorable defendants. Zapf and Roesch¹⁴ offered the perspective that future research should focus on identifying maximally effective treatment approaches and identifying areas of competency-based deficiency or particular symptoms that frequently complicate the restoration process.

Supporting the latter potential course of research, the few available empirical studies on effective treatment approaches had samples that were too small to allow for generalizability of findings or reliable analyses of between-group differences, or they were outdated (frequently 10–20 years old).^{9,13,14,19–21} The

time lapse is significant given publication of the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which advanced a new understanding of psychiatric symptomology and diagnostic criteria.²² This understanding is based on contemporary research, which should inform the mental health basis of all findings regarding competency to stand trial and guide treatment approaches.

Research has progressed from focusing on treatment methods to the various settings in which restoration is attempted for incompetent adult defendants presenting with different diagnostic, cognitive-functional, and criminogenic features, as discussed later in this article. Some prior treatment research focused on improving psycho-educational teaching of courtroom knowledge and expectations for behavior.²⁴ Researchers frequently expressed concern that the benefits of these approaches may be limited because defendants are frequently cognitively impaired and desperate to escape confinement, and may therefore memorize and parrot back information they do not truly or rationally understand.^{3,13,16,23,24}

The literature suggests potentially differential benefits of attempting restoration in hospitals, jails, or outpatient settings, which is the primary subject of this article. As follows, the competency and restoration literature suggests the possibility that the setting in which restoration is attempted may help to improve the restoration process in the manner suggested by Zapf and Roesch.¹⁴

Variables of Interest

This review of the literature identified variables warranting consideration in future restoration research. This review not only identified treatment setting as an independent variable of interest, but also length of restoration (LOSR) and days necessary to determine non-restorability as outcome/dependent variables. Diagnosis and cognitive limitations also warrant consideration; these were studied extensively as independent variables in other studies, and thereby should be considered as mediators or moderators in future research. This multi-level relationship has yet to be studied intensively.

Crime type was identified in the literature as a potential mediator or moderator. Multiple literature reviews consistently identified defendants charged with violent crimes as being significantly more likely to be found competent.^{5,24} However, we have de-prioritized crime type in this article because it is not

necessarily or fundamentally relevant to a determination of incompetence or restorability.²⁴

Converging points in the following literature review will suggest one of the next major directions of competency restoration research. An emerging direction is the extent to which placement in a hospital, jail, or outpatient setting may have different effects on overall rates of restoration, average LOSR, and, at least in some cases, rates of non-restorability for incompetent defendants with different diagnoses, levels of cognitive functioning, and criminogenic features. Applied to practice, the current research will also identify common features among defendants restored and not restored in each setting, which may in turn offer a helpful guide for placement decisions.

Methods

We first conducted a keyword search of the PsycINFO database for relevant articles without a specific research question in mind. Based on prior experience, we anticipated that a paper topic would flow from this relatively unstructured approach. Keywords yielding the highest number of selected articles were competency to stand trial, restoration of competency, competency, and restoration.

Because there was not an abundance of recent studies on competency or restoration, articles were initially considered for inclusion if they were clearly related to the subject matter and published within the last 15 years. This initial search yielded 33 potential articles, including five dissertations. The abstracts were then scanned for common themes and limitations that might converge in a manner suggesting a future direction for competency restoration research.

Within the initial pool of articles, eight were excluded because they were mostly focused on identifying common diagnostic features, a subject already comprehensively addressed in prior meta-analyses. We subsequently reviewed the remaining 25 articles and organized key points under headings, which eventually became the headings of this article. Thereafter, 13 additional articles were selected based on follow-up consultation with colleagues and determination that they offered partial answers to limitations identified in the initial pool of articles. Meta-analyses and papers published within the last five years were prioritized. Dissertations were retained as adjuncts to primary sources given the inclusion of more data on the aforementioned variables of interest.

(e.g., diagnosis, cognitive limitations, rates of non-restorability, etc.). As initially anticipated, from this process flowed the research question alluded to previously and fully articulated in the concluding section of this article.

Incompetence and Restorability

It is important to begin with a brief review of the national results of competency-restoration efforts. Research suggests that restoration attempts have been generally successful. Pirelli *et al.*¹⁸ conducted a meta-analytic review of 68 studies conducted between 1967 and 2008. Their results indicated that approximately 81 percent of individuals across studies and diagnostic categories were eventually restored, usually within 90–120 days.¹⁸

The most common disorders associated with being found incompetent to stand trial were primarily psychotic, secondarily cognitive (sometimes as associated features of psychosis), and to a lesser extent, affective.^{4,5,8,9,16,17,24,25} Pirelli *et al.*¹⁸ found that evaluatees with psychotic disorders were approximately eight times more likely than evaluatees without psychotic disorders to be found incompetent. Consistent with Pirelli *et al.*,¹⁸ Schwalbe and Medalia⁵ reviewed several older meta-analyses and concluded a finding of competence was most often associated with non-psychotic affective disorders among defendants found to carry a psychiatric diagnosis. Consistent with prior research linking psychosis and cognitive limitations with findings of incompetence, research on defendants with schizophrenia indicated a finding of incompetence was correlated with severity of cognitively related symptoms, including disorientation, hallucinations, behavioral disturbance, impaired memory, lack of spontaneity and flow of conversation, difficulties in abstract thinking, and stereotyped thinking.^{5,20}

Structured-interview and psychological-testing studies have attempted to identify symptoms and impairments associated with longer LOSR or non-restorability. There has been some indication that longer LOSR may be associated more with the severity of negative symptoms of schizophrenia than with positive symptoms.²⁰ A study with a smaller sample size indicated a preliminary relationship between longer LOSR and higher global psychiatric symptomatology, as measured on the Brief Psychiatric Rating Scale-Expanded (BPRS-E).²⁶ There were mixed findings regarding the possibility of a relationship

between LOSR and indicators of verbal learning and memory.^{27,28} Treatment factors associated with a higher likelihood of being found non-restorable have included higher numbers of psychiatric hospitalizations and lower responsiveness to medications.^{5,14}

Prominent vulnerability, sociodemographic, and treatment factors have also been identified in the research on competency and restoration. Some studies,²⁴ though not all,²⁵ have demonstrated a significant relationship between a finding of incompetence and not having completed high school. A finding of trial incompetence has also been found to associate significantly with being unemployed,¹⁸ receiving a social security disability income, or being unmarried, though without controlling for potential covariance with diagnosis.⁵ Older age was frequently identified as a correlate of both incompetence^{5,24} and non-restorability,^{14,25} even after controlling for dementia diagnosis.²¹ Most studies suggested that African Americans and members of other minority races are more likely to be found incompetent, whereas findings on gender have indicated no significant difference.^{5,19,24}

Ross and colleagues²⁵ conducted a neuropsychological study on restoration for 288 forensic inpatients in a state hospital facility in California who were restored within 36 months of admission. The mean age for the sample was relatively young at 39.9 years (i.e., suggesting a potentially better prognosis), while mean years of education was approximately 11.2 (i.e., indicating a potentially poorer prognosis). Most defendants/participants were diagnosed with psychotic disorders ($n = 169$, or 58.7%) and scored, on average, between two and three standard deviations below the mean on index scores of attention, language, multiple indicators of memory, and global performance; average LOSR was 7.2 months. The authors concluded that defendants scoring three to four standard deviations below average on the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) were nearly three times more likely to require a greater-than-average LOSR.²⁵ Crime type was not reported. Additionally, it is noteworthy that the mean number of days to restore was significantly longer than the national average data reported by Pirelli *et al.*¹⁸ Thus, particular areas of cognitive dysfunction identified in the study by Ross *et al.*,²⁵ as well as global cognitive impairment, may cue hospital administrators and forensic practitioners to the likelihood of longer LOSR and a higher-

than-normal likelihood of being found non-restorable. These findings were also consistent with previously noted pilot research findings.^{27,28}

Location of Restoration Efforts

We reviewed research on the programmatic designs, benefits, and drawbacks of restoration programs in hospitals, jails, and outpatient settings. In each reviewed study, available data on psychotic disorders, cognitive functioning, crime type, LOSR, non-restorability, malingering, and medication adherence were presented and compared across treatment environments. The purpose of these comparisons was to inform the reader about how outcomes in different treatment settings are affected by potential mediator or moderator variables discussed in previous sections of this article. Absences of such data were identified as limitations, which should be better accounted for in future research.

Competency Restoration in State Hospitals

Throughout history, most defendants found incompetent have been committed to state hospitals.^{2,8} Defendants undergoing competency proceedings make up the largest group of psychiatric patients remanded to hospitals by the criminal justice system.⁵

Review of Programmatic Strategy

To illustrate the potential benefits of hospital-based care, Wolber *et al.*²⁹ reviewed the methodology and outcomes of the restoration program at Central State Hospital in Virginia. Representatives from Central State Hospital described a highly specialized treatment team and approach. The four-person evaluation team involved professionals experienced and trained in competency standards, restoration interventions, courtroom procedures, and expert testimony. A therapist was assigned to guide treatment-team coordination, monitor medication effectiveness, observe defendants' interactions, and consult with designated evaluators. Symptoms and impairments interfering with progress toward competency were identified in treatment plans. Meaningful improvement led the restoration therapist to coordinate a follow-up competency evaluation.

Wolber *et al.*²⁹ concluded with an informative discussion of how restoration outcomes were measured and perhaps should be measured in other settings. Central State Hospital reported an average LOSR of 73 days, though with a wide range of 1–560 days.

The range was interpreted as an indication that the general usage of a measure of central tendency may be misleading and, therefore, may be less useful. As an alternative, the authors indicated that the number of defendants either restored or found non-restorable within specified time frames may be a better measure of outcome because the multi-level measure would account for multiple ways in which competency proceedings are resolved. Under this system, Central State Hospital reported that 27 percent of defendants were restored or found non-restorable within 30 days, 48 percent within 60 days, and 89 percent within 180 days, with less than 2 percent remaining in the restoration process after one year. A limitation of this study was that data on participants' demographics, diagnoses, cognitive functioning, and crime type were not reported.

Research

Anderson's dissertation²³ included 75 participants found incompetent to proceed/stand trial, diagnosed with intellectual disability (IQ less than two standard deviations below average), and housed and treated in either state hospitals or community-based settings (the number of patients in each setting was not reported). The purpose of this research was to determine whether restoration outcomes differed depending on the extent of participant's cognitive limitations and the treatment setting in which they were housed. Suggesting a better prognosis for restorability, the sample was composed mostly of younger adults (approximate mean age of 32 years) who committed violent/sex crimes (64% of the sample in community-based settings, 72% of the sample in hospitals). IQ scores for the entire sample were on average between two and three standard deviations below the mean, and the number of prior psychiatric hospitalizations ranged from one to two (i.e., significant psychiatric history), suggesting a potentially poorer prognosis for recovery. Only 5 percent of defendants in community-based settings had psychotic disorders, whereas 47 percent of participants in hospitals had psychotic disorders. IQ scores were similar across settings.

Results from Anderson's dissertation²³ were later revised and presented in a peer-reviewed article by Anderson and Hewitt.¹⁹ The follow-up research determined (through additional statistical analyses) that placement in either a state hospital or a community placement did not significantly predict a greater

likelihood of restoration. However, this null finding should be considered in light of the hospital subsample having almost 10 times the number of participants with psychotic disorders, hospitals generally servicing much more severely ill/compromised and dangerous defendants, and the combination of severe cognitive limitations and psychotic disorders suggesting, per prior research, a higher likelihood of non-restorability. Consistent with research reviewed in earlier sections of this article, Anderson and Hewitt¹⁹ found that restored defendants had significantly higher IQs (approaching the borderline range of functioning) and were more likely to have been accused of violent crimes. Among the limitations, major outcome variables noted in prior research (i.e., LOSR and number of defendants found non-restorable) were neither reported nor controlled for.

Theorized Advantages and Disadvantages

Among the advantages of attempting restoration in a hospital is the humanity of remanding individuals with mental illnesses to facilities oriented primarily to their treatment as opposed to a primarily custody-oriented jail setting. When incompetent defendants are placed in hospitals, they receive multiple needed services in addition to competency restoration, including medications that help address psychiatric and medical conditions that are less related to competency, greater resources to maintain adherence, rehabilitative interventions, and discharge resources related to housing and outpatient care. The provision of intensive and multi-faceted services may better prepare defendants to return to the community in a more functional state. Similarly, the extent of available treatment has been argued to be the major difference between a hospital and a jail.³⁰

An additional advantage of attempting restoration in hospitals is that provider expertise and resources are typically more specialized and diversified. This consolidation of resources is often necessary to identify, diagnose, and differentiate severe and complex psychotic, personality, dissociative, or factitious disorders that may otherwise complicate restoration efforts.⁸ A multitude of surveyed hospitals have attributed 80 to 90 percent restoration rates not only to their greater support for medication adherence and competency-related psycho-educational instruction, but also to a greater number of therapeutic and rehabilitative services, mock trials and

role plays with actual attorneys and judges, classroom environments with written competency exams, and anxiety-management training specific to courtroom contexts and scenarios.^{2,3,5,13}

The main disadvantages of hospital-level care are higher expenses and bed resource considerations. Greatly exceeding the costs associated with attempting restoration in jail or in community-based settings, costs of restoration in hospitals range from \$401 to \$834 per defendant per day, according to research studies.¹⁶ It is difficult to determine the overall quality of hospital care, although it is noteworthy that by August 2002, 137 of 149 state mental hospitals (92%) were accredited by The Joint Commission.⁸

One of the ways that Florida State Hospital in Chattahoochee, Florida, optimizes scarce public resources is to hire not only licensed practitioners, but also to hire new graduates from doctoral psychology programs as well.³¹ Florida State Hospital places new graduates directly into full-time competency evaluator roles where they receive formal and on-the-job training, as well as supervision from highly regarded state-certified evaluators and founders of widely used malingering measures. Thereafter, postdoctoral residents are afforded opportunities to progress in their independence, licensure acquisition, and professional advancement relative to their commitment and growing skill set, which promotes retention and longevity.

Medication Considerations

Although some jails have procedures for involuntarily medicating adult inmates with mental illnesses on the basis of safety concerns (in accordance with *Washington v. Harper*, 1990), the administration of involuntary medications solely for restoration purposes occurs nearly exclusively in hospitals.³² Medications are the primary treatment strategy for many incompetent defendants, particularly those with psychotic disorders, often despite their objections.³³ Since the landmark case of *Sell v. United States* (2003), a defendant may be involuntarily medicated solely for the purpose of restoration, provided that there is a compelling government interest in prosecuting the case; there is a reasonable likelihood of restoration occurring in the future and that medication side effects will not interfere with the defendant's ability to exercise his or her trial rights; medications are the least intrusive option for treatment; and medications are medically appropriate.³⁴ Since

Sell, there have been lingering questions regarding the ethics of medicating patients primarily for legal purposes and despite evidence supporting the necessity in many cases.^{24,34,35}

Herbel and Stelmach³³ conducted a retrospective chart review on 22 defendants diagnosed with treatment-refractory delusional disorders and receiving involuntarily administered antipsychotic medications. Of the 22 defendants, 19 (87% of the sample) were between 34 and 57 years old, 18 (82%) were arrested for violent crimes, and 14 (64%) were rated as having average intelligence. As noted earlier, relatively younger age, violent charges, and average (i.e., not lower) intelligence are suggestive of a marginally better prognosis for restoration. Of the 22 defendants, 15 (or 68%) were of Caucasian ethnicity. Among these involuntarily medicated defendants, 17 defendants (77%) were ultimately restored to competency, despite longstanding assumptions that delusional disorders do not improve with medications. This study was limited by the sample size being too small to conduct reliable between-group analyses. In addition, LOSR and the number of defendants eventually found non-restorable were not reported.

Competency Restoration in Jail

In most states, after an initial evaluation, defendants can continue to be evaluated for competency and restored in jails.² Although hospitalization is significantly more common, interest in jail-based restoration has grown due to concerns about the high cost of hospitalization, the higher risk of attempting restoration in the community, and jail-based competency programs' reporting of noteworthy rates of restoration. In an age of managed care and scarce public resources, optimization of resources is necessary to preserve the extent of available forensic mental health services in many jurisdictions.

Review of Programmatic Strategy

Several authors have described the parameters and potential benefits of jail-based restoration programs currently in operation.^{36–38} Some programs, such as those in Fulton County Jail in Georgia and The Liberty Program (i.e., Liberty Healthcare) in California, service defendants in pod-based/dormitory-style housing, provide a daily group schedule, and individualized treatment.^{36,38}

The Liberty Restoration of Competency program (ROC) provides twice daily one-to-one restoration

services, as well as daily groups in which defendants receive knowledge-based instruction in the major domains of competency. In accordance with the *Dusky* standard, the domains include defendants' factual understanding and rational appreciation of their charges, possible sentences associated with those charges, the adversarial nature of the justice system, an ability to rationally assist an attorney in their defense, behave appropriately in court, and testify relevantly if called upon to do so.⁷

A jail-based restoration program in Texas goes a step further in seeking to provide as many treatment hours in jail as are typically provided in hospitals. To this end, the Texas program strives for a low defendant-staff ratio (3.7:1) and employs a psychiatrist. However, this program was put forth as a pilot due to various resource challenges.³⁷

Research

Rice and Jennings¹⁷ reviewed the findings from a ROC program in a California jail and compared them to the findings from a ROC program in a Virginia jail. The ROC programmatic approach in both locations was theoretically consistent with a multidisciplinary hospital approach in terms of being holistic, motivational, and recovery-focused; tailoring interventions to competency-based deficiencies; and adjusting for defendants' cognitive limitations. Defendants in competency proceedings were also placed in specialty pods away from the general population.

At the time of manuscript submission, ROC programs had been piloted in Virginia and had been in operation for 29 months in California, serving 192 defendants. Defendants in the California ROC program were mostly of cultural minority backgrounds ($n = 109$, or 56.8%) and were diagnosed with psychotic disorders ($n = 126$, or 65.6%). Supporting a potentially better prognosis for restoration, the published rate of defendants with psychotic disorders appeared lower than what is typical of a state hospital census, while average age was relatively younger at approximately 37 years.

Whereas aforementioned hospital costs ranged from \$401 to \$834 per day with an 80–90 percent restoration rate, the jail-based ROC programs had a cost of approximately \$42 per day with an 86 percent restoration rate in Virginia, and a cost of roughly \$222 per day with a 55 percent restoration rate in California. In California, the remaining 45 percent of incompetent defendants were eventually transferred to the state hospital

for more intensive treatment. Regarding LOSR in the California program, 55 percent of the sample was restored within an average of 57.4 days, while 40 percent were transferred to the hospital within 90 days. These numbers are comparable with the average LOSR noted in prior meta-analyses.

Results from the California ROC program suggest positive implications for jail-based restoration efforts. It can be concluded that jail-based programs are less costly than hospitalization. Jail-based restoration may be a reasonable first step in the process toward restoration, prior to initiating hospitalization, and possibly even in cases of psychosis (if jails were sufficiently resourced and authorized to administer medication over objections).

Differences in the findings from jail and hospital-based competency programs may also be explained as a function of the greater severity, complexity, and complications usually associated with defendants who require hospitalization. Efficacy between treatment environments would be difficult to determine because the more severely ill, dangerous, and treatment-refractory cases of mental illness are typically referred from jails to hospitals. Consistent with this assertion, Rice and Jennings reported that 69 of 126 ROC program inmates with psychotic disorders (55%) were transferred to state hospitals, which is significant because a psychotic disorder diagnosis was found in prior research to suggest a poorer prognosis.¹⁷ It was also reported that 85 percent of defendants in the California ROC program were fully adherent to medication, with basic rewards for adherence such as candy bars, chips, and soup, an incentivizing structure typically discouraged if not outright prohibited in hospitals.

Consistent with the limitations of previously reviewed hospital studies, ROC program research did not report LOSR for defendants transferred from jails to hospitals, numbers of defendants eventually found non-restorable, or sample demographics related to cognitive functioning and crime type. Recurring limitations in available data better permit theoretical comparisons of jail and hospital studies than statistical comparisons. Therefore, future research must account for and control for such recurring limitations.

Theorized Advantages and Disadvantages

Jail-based restoration programs are much less expensive than those in hospitals, with state government agencies reporting that jail-based programs

have yielded cost savings of 50–80 percent.¹⁶ In addition, offering restoration services in jails may reduce the time necessary to initiate restoration, given the potential for treatment to begin nearly immediately after incarceration. In some jurisdictions, there are relatively long wait times for defendants to be admitted to state forensic hospitals. Thus, not starting restoration services in jails and waiting for a hospital bed could significantly delay treatment and, in many cases, exacerbate symptoms of mental illnesses.

There may be additional treatment advantages associated with the jail environment. The increased supervision, monitoring, and relative discomfort defendants usually ascribe to jail may motivate some defendants to participate more gainfully in restoration services and progress toward regaining their opportunity for trial,¹⁷ as will be discussed in more detail in the section on discouraging malingering below. While there is no question that jails are not designed for mental health care, there is much that a skilled jail-based treatment team can do to improve the quality and effectiveness of services.¹⁷ Thus, it should not be assumed that jail-based restoration is necessarily inferior to hospital-based restoration. However, due to insufficient resources, it is unlikely that jails could provide the same level of medication support, classroom-based competency instruction, mock trials, symptom management, and rehabilitative services typically provided in hospitals and associated with impressive outcomes, as summarized earlier.

Kapoor¹⁶ provided an informative summary of the theorized drawbacks of jail-based restoration services as inverse to the ethical positives of attempting restoration in hospitals. Within this summary, it was noted that there may be concerns about patient rights and further criminalizing the mentally ill when an individual is kept in jail for restoration, hospitalization is avoided at least partially for public policy reasons, and mental illness is so severe that a strong relationship between the individual's illness, impairments or problematic behavior and trial incompetence has been determined by a judge.

Given the limitations in the research, total efficacy is not known, although there may be good reason to think hospitalization would produce better results, particularly for severely psychotic adults. It is also possible that jail inmates with severe psychotic disorders may experience symptom exacerbation and perform even more poorly in competency evaluations if their mental health crises are addressed via standard

correctional system interventions. With regard to initiating jail-based restoration, it is of further concern that medications are the primary intervention (particularly for defendants with psychotic disorders), defendants are often resistant to taking medications, and, in some jurisdictions, jails lack the statutory authority to administer medications over objections.

For such reasons, jail-based restoration may be preferred for non-psychotic or less severely and blatantly psychotic individuals who need shorter-term treatment, with state hospital beds reserved for more seriously ill inmates requiring longer-term hospital-level care.¹⁷ With such reasoning in mind, some statutes (e.g., VA statute 19.2–169.1 and CT general statute 54–56d(i)) require that an evaluator, who may be uniquely situated to know the challenges affecting a defendant's competency, make a recommendation to the court regarding whether restoration should be provided on an inpatient or outpatient basis. In such cases, statutes could permit jail-based restoration as a third option for defendants deemed inappropriate or too dangerous for outpatient restoration or not in obvious need of hospitalization.

Discouraging Malingering

Jail-based restoration, in some cases, may lower rates of malingering. Forensic experts have estimated the base rate of malingered trial incompetency to be approximately 15–20 percent.¹ However, rates may be significantly higher in serious felony cases where longer prison sentences are foreseeable. Malingering is of particular concern because it diverts scarce hospital and treatment resources away from individuals who are sincerely compromised and potentially more receptive or responsive to intervention.^{1,16}

Researchers offer perspectives on whether jail placements may or may not discourage malingering. Kapoor¹⁶ hypothesized that providing competency restoration services in jail, essentially because of the relative discomfort, may in some ways incentivize sincere participation. Specifically, it is often the case that hospitals are relatively more comfortable than jails and afford defendants greater privileges, provisions, and of course, the absence of correctional officers. Thus, a defendant participating in hospital-based restoration services, when found competent in a hospital and returned to jail (as is customary), would essentially be participating in furtherance of what would usually be a less desirable immediate

outcome. In contrast, defendants in hospitals who successfully malinger would be maintaining a relatively more comfortable placement. In many cases, jails are often so discomforting and absent of provisions and recreation services that malingering defendants (who may learn or accept that hospitalization is not an option) may eventually become willing to demonstrate their competency, take their chances in court, and hope for a favorable outcome. In either setting, motivation to return to court and potentially face a prison sentence may be low, though possibly marginally higher in jails. Miller⁸ added that inpatient hospitalization essentially exposes defendants to peers with a broad range of mental illnesses and mental health terminologies, so that they may learn to malinger more effectively. In addition, hospitals are often more adept at detecting malingering given opportunities for a larger network of professionals to observe the defendant over time on the ward, rather than only during an interview in jail, with additional consultation with jail staff.

Competency Restoration in Outpatient Settings

Outpatient programs have gained popularity in recent history as a cost-effective alternative to attempting restoration in hospitals. As described by Miller,⁸ an outpatient program was piloted in Tennessee soon after the *Jackson* case was decided and inspired considerable interest among policy makers and practitioners.¹⁴ Tennessee court officials and sheriff's department officers reported that outpatient restoration was a major success in terms of high (although unspecified) rates of restoration, significant reduction in transportation costs and coordination problems, cost savings associated with less reliance on hospitals, and local university students gaining opportunities to receive mental health training.^{8,14}

Programmatic Strategy

The following review of outpatient strategy and best practices is based on co-author Dr. Apryl Alexander's experiences within the Denver Forensic Institute for Research, Service, and Training (or Denver FIRST) Outpatient Competency Restoration Program. This program provides court-ordered outpatient restoration for lower-risk adults and juveniles found incompetent to proceed in Colorado and subsequently released to the community. Defendants typically have developmental delays, head or traumatic brain injuries, or serious mental illnesses that can be managed in a less restrictive level of care than

hospitalization. Defendants may pay for their care on a sliding-scale basis, which may go down to zero (i.e., pro bono) in cases of indigence and with services paid for by state funding. Most referrals come from attorneys or courts. At the time of manuscript submission, the program could work with a maximum of approximately 35 defendants at a time. Similar to strategies utilized by Florida State Hospital, Denver FIRST also trains and employs students from a master's degree program in forensic psychology. Defendants typically receive additional and coordinated mental health services from community mental health providers.

Educational classes and individual restoration services tend to occur only once or twice a week, whereas such services are typically provided more frequently in hospitals (and possibly jails). Outpatient providers must coordinate their schedules with psychiatrists, case managers, and substance-abuse treatment providers. In jails or hospitals, providers are likely to be more accessible to defendants due to closer physical proximity. These communication difficulties can be particularly problematic in cases of outpatient restoration where resources for psychiatrists are minimal and medication adherence and abstinence from drugs and alcohol cannot be achieved as a function of a controlled environment (as in the case of a jail or hospital). Thus, poor medication adherence and access to drugs and alcohol are often stand-alone barriers to effective outpatient restoration, particularly for more severely and comorbidly ill defendants.

There is indication that policy makers and the public may be at least marginally more supportive of outpatient restoration efforts than the judiciary. Up to 2003, 33 states permitted different forms of outpatient restoration.⁸ By 2009, this number had increased only slightly to 35.¹⁵ From 2011 to 2016, only 16 states had active outpatient programs.^{2,16} Researchers emphasize the need for improved education and dissemination of literature describing the results of such programs, with particular attention to rates of restoration and acknowledgment of public safety concerns.^{2,29}

In addition, outpatient restoration may grow in availability and acceptance if programmatic strategies and arguments in support of those strategies more convincingly suggest how to optimize the balance between safety concerns, less restrictive treatment mandates, and increased usage of potentially

effective and cost-saving treatment. As a sign of one locale moving toward acceptance of outpatient restoration, and in support of the prior theory, local judges seem generally in support of Denver FIRST, with referrals increasing based on growing concern about jail overcrowding, the complications of housing the vulnerable individuals with mental illness in jail settings, and hospital bed resource considerations.

Gaps in implementation of outpatient programs may also be explained, in part, by insufficient resources. Miller⁸ indicated that successful outpatient programs in the 1970s and 1980s utilized evaluators and treatment providers who were highly trained in competency and restoration, which may be challenging for resource-starved community mental health agencies to facilitate. An additional resource consideration is that, while restoration primarily occurs via medications, psycho-educational interventions are also important and are less likely to be reimbursed by insurance companies.²

Research

Gowensmith *et al.*² reviewed the results of outpatient restoration programs and confirmed support for major cost savings, as well as the position that a majority of appropriately selected, less dangerous defendants could be safely treated in the community. Forensic administrators surveyed by Gowensmith *et al.*² reported daily costs of \$101–\$500 per day, with an average of \$215 per day (not accounting for additional outpatient resource coordination), which was about \$388 less per day than hospitals.² Wolber *et al.*²⁹ indicated similar transportation and cost benefits noted by Miller,⁸ adding that defendants permitted to remain housed in their communities or counties of origin were consistently better able to get to court on time, communicate directly with their attorneys, and access local resources.

Recent research explored the potential benefits and drawbacks of attempting restoration in different outpatient settings. The dissertation by Tang³⁹ was a retrospective study of 208 adult defendants in southern Florida deemed incompetent to stand trial or proceed. They were housed either in independent living or drug treatment facilities, and restored within three years. Most defendants and participants across treatment settings were relatively younger adults (mean of approximately 39 years), indicating a potentially better prognosis. A slight majority of the

sample were accused of violent crimes ($n = 106$, or 51.0%). Defendants were disproportionately from cultural minority backgrounds ($n = 98$, or 47.1%), and single or never married ($n = 148$, or 71.1%). Suggestive of a poorer prognosis, high numbers of participants were diagnosed with psychotic disorders ($n = 108$, or 52.0%), had IQ scores between one and two standard deviations below the mean ($n = 74$, or 35.6%), were psychiatrically hospitalized one or more times ($n = 96$, or 46.2%), and had an approximate mean of 11 years of education, which was also consistent with the mean education of the sample in the neuropsychological study by Ross *et al.*²⁴

Across treatment groups, the mean LOSR was roughly six months. This number is greater than the national average indicated in prior meta-analyses, although it is fairly consistent with LOSR reported in prior hospital studies. In a manner consistent with recommendations from Wolber *et al.*²⁹ regarding a multi-level outcome measure, Tang³⁹ reported that 122 (58.7%) individuals regained competency, 28 (13.5%) were rearrested, 21 (10.1%) had their charges dismissed, 25 (12.0%) were committed to inpatient hospitals, and 8 (3.8%) were found non-restorable.

A survey and interview study of forensic practitioners in 48 U.S. jurisdictions offered further evidence in support of the potential benefits of outpatient programs. Outpatient restoration was attempted within 16 jurisdictions in 2014, with between one and 100 cases per jurisdiction per year around this time.² Approximately half of outpatient restoration cases involved defendants who were charged with misdemeanors, while the other half were charged with nonviolent felonies. Relatively lower risk was indicated by defendants tending not to have lengthy criminal records and being relatively psychiatrically stable, medication-compliant on a voluntary basis, and younger. These factors were noted in prior research to suggest a relatively better prognosis for restoration. It was noted that outpatient cases involved defendants who were disproportionately of cultural minority background. In total, and across jurisdictions, outpatient restoration was achieved in 70 percent of cases, with an average of 20.3 percent of cases being found non-restorable, and an average of 149 days necessary to restore competency. Information on the remaining 10 percent of cases was not made available. The number of individuals diagnosed with psychotic disorders or presenting with significant cognitive impairment was not reported.

Citing the study by Gowensmith *et al.*,² and with limitations of previously published research convergent with their aims, Mikolajewski *et al.*⁴⁰ examined the characteristics of defendants successfully restored in outpatient settings. The authors collected data on 80 incompetent adult defendants in Louisiana and accounted for a multitude of the mediator, moderator, and outcome variables not reported or accounted for in other studies.⁴⁰ Of the 80 defendants, 65 (81.3%) were African American, while 69 (86.3%) were single or never married, which is consistent with prior research on incompetent defendants on the whole. Most outpatient restoration defendants were male (54, or 67.5% of the sample). Whether defendants in this study were found incompetent or competent was not significantly associated with age differences, nor were there significant differences depending on multiple income and employment variables. Supporting the prior mentions that crime type need not be highly prioritized in future research, Mikolajewski *et al.*⁴⁰ found no significant association between a determination regarding competency or restoration and multiple criminogenic variables (e.g., history of juvenile offense, number of previous arrests, and whether the current charge was homicide, or other and unspecified forms of violence).

Analyses of clinical variables and a finding regarding competency are noteworthy.⁴⁰ Consistent with prior research, defendants who were restored to competency were significantly more likely to have graduated high school, while defendants who were diagnosed with intellectual disability plus mental illness were less likely to be restored. Whereas prior studies found that longer LOSR was associated with higher BPRS-E scores (a structured interview tool), the study by Mikolajewski *et al.*⁴⁰ found no significant difference in restoration depending on higher/lower Global Assessment of Functioning (GAF) scores. This difference may be explained more as a function of the unreliability of unstructured and non-standardized clinical ratings, such as the GAF, than of genuine difference. Surprisingly, there was not a significant difference in findings of competency or incompetency depending on whether defendants were diagnosed with a psychotic disorder or the number of prior hospitalizations, which would ordinarily indicate symptom chronicity (and poorer restoration prognosis). There were significant differences depending on whether defendants had violated their pretrial conditional release for court-mandated out-

Table 1 Attributes of State Hospital, Jail and Outpatient Restoration Programs

Treatment Setting	State Hospitals*	Jail†	Outpatient‡
Costs	\$300–\$1,000 per day	\$42–\$222 per day	\$100–\$500 per day
Rates of restoration	80–90%	55–86%	54–70%
Mean LOSR (per research)	73 days	57.4 days, usually followed by transfer to state hospitals	149–207 days
Patients served	High % of defendants with psychotic disorders	Moderate % of defendants with psychotic disorders	Moderate to low % of defendants with psychotic disorders
Crime type/risk	Moderate to high level of dangerousness	Moderate to high level of dangerousness	Moderate to low level of dangerousness
Medication considerations	High % of adherence, largely due to greater resources to administer involuntary medications	Limited resources for involuntary medication administration	High % of adherence, largely based on screening
Malingering considerations	May teach defendants how to malinger more convincingly	Theoretically ideal for malingeringers	Setting less likely to affect malingering either way

* Data on hospital-based restoration obtained from References 2, 3, 5, 8, 13, 16, 19, 23, 29.

† Data on jail-based restoration obtained from References 1, 16, 17, 36, 37, 38.

‡ Data on outpatient-based restoration obtained from References 2, 8, 16, 17, 29, 39, 40.

LOSR = length of stay necessary to achieve restoration.

patient restoration, had significant behavioral incidents soon after starting outpatient restoration, had more total behavioral incidents, and were re-arrested or re-hospitalized during community-based restoration. Multivariate analyses incorporating a multitude of these demographic and clinical variables explained 26.5–35.4 percent of the total variance, thereby underscoring the need to consider and incorporate these and other similar variables in future studies.

Theorized Advantages and Disadvantages

Outpatient restoration is typically and understandably reserved for defendants facing less serious or nonviolent criminal charges.¹⁷ Prime candidates for outpatient restoration tend to have less extensive criminal histories and better track records regarding medication adherence, effectively utilizing services to prevent full decompensation, and appearing in court as ordered. As reviewed previously, and in addition to cost savings, research is increasingly suggesting the possibility that greater numbers of incompetent defendants might be safely housed and restored in the community. Although research suggests that outpatient defendants are generally less impaired and yet restored somewhat less frequently (see Table 1), it is also reasonable to suspect that defendants accused of less serious crimes and who seem more amenable to treatment may be more likely than hospitalized defendants with more serious charges and criminal records to have charges dropped or resolved via diversionary sentences.

Of additional consideration, defendants deemed incompetent to stand trial have been discussed in the

literature as typically being of lower socioeconomic status. Therefore, they may have limited access to resources, including transportation. As a result, prior positions on the transportation benefits of outpatient restoration should be clarified to reflect the possible shifting of the burden from understaffed and over-crowded jails or hospitals to defendants who are often impoverished and living with severe mental illness. Additional oversight and supports may be needed to effectively manage individuals in the community and maximize restoration efficacy, particularly in cases of psychotic, cognitively limited, or brain-injured defendants who often do not have family members or friends available to help them navigate and coordinate public transportation. Also, defendants in outpatient restoration are often homeless and without phones. Thus, scheduling sessions and follow-up visits is more difficult than when defendants are confined in jails or hospitals.

Expanding Outpatient Services as a Balanced Alternative

Pressure for cost saving and less restrictive levels of care may be balanced via expanded usage of outpatient restoration services. This would require tolerance of at least a marginally higher level of risk for at least some defendants in criminal proceedings. Outpatient restoration would be a reasonable first step for defendants accused of nonviolent or lesser forms of violent crime (such as simple assault not resulting in major injury), without significant histories of serious violent crime, and not clearly meeting criteria for civil commitment.

To this end, supportive housing placements with a restoration component, case-management services, and assigned mental health probation officers with authority to return non-compliant defendants to jail settings may be advantageous. The latter strategy, however, may raise ethics questions about outpatient restoration effectively serving as a kind of probation without adjudication (i.e., sentencing prior to trial and conviction), especially if these arrangements became dispositional in terms of a focus on longer-term services enforced by court order. However, granting defendants the opportunity to remain in the community and out of institutions, even via involuntary measures, may optimally balance individual freedom and public safety concerns. Diversional options, with additional and purely voluntary services, would show even more respect for a defendant's self-determination.

Table 1 presents data from multiple studies of hospitals, jails, and outpatient settings. Data are presented on cost per day, restoration or non-restorability, diagnosis, crime type/dangerousness, medications, and malingering considerations. Within Table 1, quantitative research findings and qualitative perspectives are synthesized in an attempt to present the sum total of available research and to compensate for many studies not reporting quantifiable data in each category.

Conclusions

A review of the extant competency and restoration research suggests a future course of study and even the major variables within its design. Within the literature, there is growing interest in the potentially differential benefits of attempting restoration in hospitals, jails, and outpatient settings (i.e., the independent variable) for defendants of varying diagnostic categories, levels of cognitive functioning, and crime types (i.e., mediators or moderators), with rates of restoration and non-restorability as primary indicators of outcome (i.e., the dependent variables). Empirical research on this topic could address gaps in previously reviewed studies, including those studies not reporting all of the major competency and restoration variables even as descriptors, let alone controlling for potentially significant interaction effects.

From this review, as summarized in Table 1, implications for practice can be formulated. It appears that hospital beds used for competency restoration might be best reserved for defendants facing serious

and violent charges, with psychotic disorders, cognitive impairment, medication non-adherence, and lesser concern about malingering. Defendants whose competency may be more tied to suspected malingering may be best served in jail. Under this system, it is expected that primary barriers to restoration for genuinely psychotic defendants would usually be psychiatric in nature and would flow into other secondary barriers related to behavioral disturbance, lack of rational understanding, and possibly deficits in factual-legal knowledge. Jail-based competency may be optimal for defendants who may have mental health issues, though primary barriers to competency are volitional-behavioral in nature. More specifically, if defendants are suspected of malingering, refuse to participate in hospital-based services, or show that volitional, antisocial, or aggressive behavior is clearly the major impediment to restoration, jail may be more appropriate and, in some cases, incentivizing.

Outpatient placements may be ideal for defendants charged with nonviolent crimes or possibly with lesser violent crimes (i.e., simple assault not causing significant injury and with less apparent likelihood of victim tampering or retaliation), who do not meet criteria for civil commitment, who do not have as significant a history of substance use, who are at least marginally more likely to be medication adherent, who show up to court as ordered, and who do not have as great a need for hospital-based services. Confirming these hypotheses through the previously proposed research may affirm clinical sensibility and improve placement decisions. As a result, defendants may be afforded the least restrictive level of care relative to restoration and public safety concerns, their constitutional rights may be maximally respected, and scarce public resources may be used as efficiently as possible.

Moreover, the prior review of research suggests that erring on the side of more restrictive (and therefore more expensive) placements in hospitals when mental health need and dangerousness are at least somewhat in question may become less acceptable over time. Expanded availability of jail-based and outpatient restoration would permit judicial systems, potentially upon the recommendation of competency evaluators, to consider a wider range of less restrictive options that may in turn be appropriate and effective in more cases than ordinarily assumed. Further establishing the need for the expansion of options, there are growing public and political de-

mands for cost-saving and less restrictive care, and for dangerous offenders to be more closely supervised, controlled, and swiftly returned to court to face their charges. This places the criminal justice and forensic mental health systems in a challenging conundrum. Empirical research for the furtherance of these hypotheses would be an important first step and a useful guide to better address these challenges in policy and practice.

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