FACTORS ASSOCIATED WITH REVIEW BOARD DISPOSITIONS FOLLOWING RE-HOSPITALIZATION AMONG DISCHARGED PERSONS FOUND NOT CRIMINALLY RESPONSIBLE

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ABSTRACT

In the Canadian forensic mental health system, a person found Not Criminally Responsible on account of Mental Disorder (NCRMD) and given a conditional discharge returns to the community while remaining under the jurisdiction of a provincial/territorial Review Board. However, the individual can be re-hospitalized while on conditional discharge, for reasons such as substance use, violation of conditions, or violence. We investigated whether being re-hospitalized has an impact on the factors associated with the subsequent Review Board disposition. Persons found NCRMD from the three largest Canadian provinces who were conditionally discharged at least once during the observation period were included in the sample (N=1,367). These individuals were involved in 2,920 disposition hearings; nearly one-third of patients (30%) were re-hospitalized after having been conditionally discharged by the Review Board. The factors examined included the scales of the Historical Clinical Risk Management-20 and salient behavior that occurred since the previous hearing, such as substance use or violence. The greater presence of clinical items resulted in a greater likelihood of a hospital detention decision at the next hearing. The effect was larger for the re-hospitalized group than for the group who successfully remained in the community since the last hearing. The results suggest that dynamic factors, specifically indicators of mental health, are heavily weighted by the Review Boards, consistent with the literature on imminent risk and in line with the NCRMD legislation.

In Canada, an individual who is found Not Criminally Responsible on account of Mental Disorder (NCRMD; i.e., lacked criminal intent at the time of the offense, akin to Not Guilty by Reason of Insanity defenses in the United States) enters the forensic mental health system and is under the jurisdiction of a provincial or territorial Review Board (s. 672.121, Criminal Code, 1985). The Review Board is responsible for determining the disposition of the NCRMD person, with the goal of protecting the public while also respecting the rights of the individual and providing an opportunity for necessary treatment and rehabilitation. The dispositions available to the Review Board are absolute discharge, conditional discharge, or detention in hospital. Under a conditional discharge, the person returns to the community, but remains under the jurisdiction of the Review Board and is subject to specific conditions set by the Review Board[1]. Examples of such conditions include residing in a specified place (e.g., supervised group home), refraining from using drugs and/or alcohol, following treatment recommendations, and travel restrictions (for more information, see Crocker, Nicholls, Charette, & Seto, 2014; Wilson et al., 2015).

The decision to order a discharge, conditional or absolute, is not taken lightly. Review Boards face pressure to balance public safety and protect the rights of the individual. To determine the appropriate disposition, the Review Board must rely on information that is presented for the hearing and conduct an individual assessment (s. 672.51, Criminal Code, 1985). Generally, the reports and the expert evidence provided to the Review Board offer information pertaining to the individual's mental and physical health, behavior, adherence to treatment/medication, and any notable events or behavior that occurred since the previous hearing (see Crocker et al., 2014; Wilson et al., 2015).

Review Board decision-making would be facilitated by the inclusion of a clinical assessment based on the use a structured risk assessment tool (Guy, Douglas, & Hart, 2015; Heilbrun, 2009; Mullen, 2006). Unfortunately, research has shown that structured risk assessments are seldom used in this capacity (Crocker et al., 2014; McDermott et al., 2008). From a comprehensive archival review of 1,800 persons found NCRMD in Canada and under the jurisdiction of a Review Board, Crocker et al. (2014) evaluated the Review Board hearing process. Through the course of the study, the sample had 6,743 Review Board hearings and the use of a risk assessment tool was mentioned in only 17% of these hearings (n=1,170). However, research from this same project has demonstrated that Review Boards do discuss empirically valid and/or legally relevant criteria [i.e., variables that are often items on recognized risk assessment tools such as the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 1998, 2006; Historical Clinical Risk Management-20 (HCR-20, Webster, Douglas, Eaves, & Hart, 1997) (Crocker et al., 2014; Wilson et al., 2015). Wilson et al. (2015) found the Review Boards considered factors that fell into three broad categories: mental health (e.g., major mental illness, substance use, personality disorder, active symptoms), treatment (e.g., supervision failure, unresponsive to treatment), and criminal history (e.g., previous violence, sex of victim). Crocker et al. (2014) found that historical items from the HCR-20, as well as compliance with medication since the previous hearing, were associated with conditional discharge decisions.

The results of the National Trajectory Project (NTP; https://ntp-ptn.org, 2009) are consistent with findings from other studies with individuals found NCRMD in Canada or persons found Not Guilty by Reason of Insanity (NGRI) in the United States. In a study examining hearings in British Columbia, Whittemore (1999) concluded that Review Boards considered a wide range of factors when rendering a decision, falling into three categories that she labeled as follows: behaviors (e.g., past and current assaultive behavior); mental health (e.g., current

[1] In one of the three provinces studied (Ontario, Québec, British Columbia), Ontario Review Boards frequently use a "detention with conditions" disposition, which often functions similarly to a conditional discharge. However, this disposition is not specifically mentioned under the legislation.

symptoms of mental illness, insight, compliance with treatment); and reintegration (e.g., social support availability).

In a more recent Canadian study, Côté, Crocker, Nicholls, and Seto (2012) demonstrated that two items from the HCR-20, previous violence and major mental illness, were consistently relevant in Review Board decisions in Québec, and another four HCR-20 items (substance use problems, personality disorder, lack of insight and active symptoms of major mental illness) were discussed in over 50% of hearings.

Compliance with medication and psychiatric treatment have been found to be associated with conditional discharge decisions in studies with persons found NGRI as well (McDermott & Thompson, 2006; McDermott et al., 2008). Other factors associated with discharge decisions include substance use, community readiness (based on current level of illness, behavioral cooperation and compliance, insight into mental illness, the relationship of the illness to the index offense, and discharge planning) and offense seriousness (McDermott & Thompson, 2006; McDermott et al., 2008).

The literature examining the factors driving Review Board decision-making suggests that the variables that are considered largely seem to map onto the legislation and the empirical evidence. However, there appears to be considerable room for improvement, particularly in the weight given to factors that are not empirically related to risk of recidivism, such as index offense severity (e.g., Callahan & Silver, 1998). Decision-making would be more reliable through a structured process, rather than cherry-picking items thought to be of relevance to a particular case or idiosyncratically considering relevant information (e.g., Bloom & Webster, 2013; Mullen, 2006).

Success while on Conditional Discharge

Not everyone released on conditional discharge successfully transitions into the community. Focusing on recidivism, Charette et al. (2015) found that 20% of forensic psychiatric patients committed a new offense within 3 years after a conditional discharge. The rate of serious recidivism (i.e., offenses causing death or attempting to cause death and sex offenses), however, was extremely low (0.6%; Charette et al., 2015). Recent studies with persons found NGRI in the U.S. have also demonstrated similar rates of success on conditional discharge. Manguno-Mire et al. (2014) reported that 70% of persons found NGRI in their sample successfully maintained their conditional release over a 10-year study period; Vitacco, Vauter, Erickson, and Ragatz (2014) found 76% of their sample remained in the community after their release (an average of two years in the community at the time of data collection). In both studies, the majority of failures on conditional release were due to violations of conditions, rather than rearrest due to new criminal charges. Many of those violations may reflect individual setbacks for the patient, but could be considered successes in terms of community supervision. For instance, a re-hospitalization may be in response to a deteriorating housing situation beyond the patient's control or a need to revisit medications, which is quite different from a revocation of discharge following recidivism or violation of other conditions.

This research shows that Review Boards are considering clinically relevant and empirically validated variables. What is not known is how a return to hospital impacts future Review Board decisions. That is, what impact, if any, does re-hospitalization during conditional discharge have on the next Review Board decision? Further, do behaviors since the previous hearing, such as violence, have an impact on the next disposition?

Current Study

The aim of the current study was to investigate whether a return to hospital while on conditional discharge has an influence on the factors associated with the subsequent Review Board decision. Review Board hearings from the NTP were used to examine whether factors (Historical (H), Clinical (C), Risk

Management (R) scales; behaviors since the previous hearing) differed in cases where an individual on conditional discharge was re-hospitalized compared with cases where the individual successfully remained in the community for the subsequent Review Board hearing. Because historical factors have changed little since the person was discharged from the hospital and the person was already considered suitable for community re-entry, the physician and clinical team (and thus the Review Boards) should pay less attention to historical factors (H factors from the HCR-20) and more to dynamic factors (the C and R scales of the HCR- 20, behavior since the last hearing). Presumably, the dynamic factors were of greater concern leading up to the re-hospitalization (because of psychiatric decompensation or other clinical concerns), and would need to be addressed as part of a re-entry plan.

We expected that decisions following a re-hospitalization would be influenced more by clinical dynamic factors, as captured by the C scale of the HCR-20 (i.e., items focused on the individuals' recent functioning and mental health status), rather than the H scale. Furthermore, we expected that adverse behaviors since the previous Review Board hearing, namely engaging in violence and non-compliance with psychiatric treatment, would be associated with future Review Board decisions as a function of whether hospitalization occurred (Crocker et al., 2014).

METHODS

The NTP (https://ntp-ptn.org, 2009) was an archival, longitudinal study examining a cohort of Canadian individuals found NCRMD in British Columbia (BC), Ontario (ON), and Québec (QC). The full methodology is described in detail by Crocker and colleagues (Crocker et al., 2015d; see also Charette et al., 2015; Crocker et al., 2014; Crocker et al., 2015a–c; Nicholls et al., 2015; Salem et al., 2014; Wilson et al., 2015). Details relevant to the current analyses are presented here. All relevant institutional Review Boards approved this project.

SAMPLE

The sample comprised 1,367 individuals from the NTP found NCRMD between May 2000 and April 2005, who received at least one conditional discharge decision from the Review Board before December 2008[2]. During their conditional discharge, 30% of the individuals were re-hospitalized at least once (n=415). Within the time frame of the study, these individuals attended 2,920 hearings, with an average of 2.14 hearings per individual during their conditional discharge (SD=1.43, Median=2, Min=1, Max=9). Table 1 provides a description of the sample

PROCEDURE

Similar to Crocker et al. (2014), the suggested model to predict the Review Board decision simultaneously considers individual characteristics that can be considered as static variables (i.e., province, gender, age, diagnosis, severity of the index offense, presence of psychiatric history), as well as behaviors and statuses that fluctuate over time (i.e., that are dynamic; presence of systematic evaluation, presence of violence, substance use, presence of suicidal thoughts, non-compliance with condition and medication, and number of HCR-20 items mentioned).

STATIC FACTORS

Socio-demographic Information

As the sample consisted of individuals who received at least one conditional discharge, and individuals in Québec were more likely to be conditionally released (Crocker et al., 2014), the sample from the province of Québec (70%) was over-represented in comparison to the initial sample (61%). The average age was 36.15 years (SD=12.11).

[2] The sample includes all individuals given a conditional discharge disposition. In ON, Review Boards frequently use a "detention with conditions" disposition, which often functions similarly to a conditional discharge. However, as this disposition is not explicitly included under the legislation, we sampled only people given a conditional discharge.

The majority was male (83%), had a psychiatric history (i.e., psychiatric consultation or psychiatric hospitalization) prior to their NCRMD verdict (65%), and had a psychotic spectrum diagnosis (58%). As primary diagnoses can change across time, we defined a psychotic spectrum diagnosis as a probability (i.e., the number of mentions of this diagnosis divided by the number of observations for each individual).

DYNAMIC FACTORS

Behaviors since the last Hearing

Behavior since the previous hearing, as discussed at each Review Board hearing, was dichotomously coded as present or absent for violence, suicide attempts or ideation, noncompliance with Review Board conditions, non-compliance with medications, and substance use. These behaviors, particularly violent behaviors, have been shown to influence Review Board decision-making (Crocker et al., 2014). The effect of these dynamic behaviors will be assessed as a function of the presence (or not) of a re-hospitalization.

Table 1. Description of the sample

Individual static characteristics (n = 1,367)	*n (%)*
Province	
Québec	956 (69.9%)
Ontario	226 (16.5%)
British Columbia	185 (13.5%)
Female	235 (17.2%)
Presence of psychiatric history	894 (65.4%)
Diagnosis	
Psychotic spectrum	794 (58.1%)
Substance abuse	589 (43.1%)
Personality disorder	525 (38.4%)
Diagnosis not specified	328 (24%)
Presence of at least one hospitalization	415 (30.4%)
	M (SD)
Age at the index verdict (years)	36.15 (12.11)
Severity of the index offense (log)	4.58 (1.15)
Number of hearings	2.14 (1.43)
Dynamic factors (n = 2,920)	*n (%)*
Detention decision	324 (11.1%)
Hospitalization	644 (22.1%)
Presence of systematic evaluation	249 (8.5%)
Behavior since the last hearing	
Violence	339 (11.6%)
Substance use	769 (26.3%)
Suicidal attempt or thoughts	83 (2.8%)
Non-compliance with Review Board conditions	1055 (36.1%)
Non-compliance with medication	687 (23.5%)
Number of HCR-20 items mentioned as present	*M (SD)*
Historical (out of 10)	4.23 (1.99)
Clinical (out of 5)	1.44 (1.29)
Risk (out of 5)	0.51 (0.83)

HCR-20 : Historical Clinical Risk Management-20.

HCR-20 Domains

The HCR-20 (Webster et al., 1997) is a structured professional judgment instrument for assessing violence risk. The guide consists of 20 risk factors that were selected based on a review of the scientific, theoretical, and professional literatures, and are categorized into three domains: historical (10 risk factors that may have been present at any time during the person's life); clinical (five items related to the patient's recent and current functioning); and risk management (five items related to the patient's plans for the future).

The objective when coding the HCR-20 was to determine the extent to which these well-validated items were mentioned by Review Boards in their reasons for their decisions. With this in mind, research assistants coded the items as "present" (the item was mentioned and was present for this individual); "absent" (the item was mentioned and was absent, i.e., not present for this individual); "mentioned but uncodable" (the item was mentioned, but it was unclear whether the factor was relevant to the accused); or "not mentioned" (the item was not mentioned). For the purposes of this study, the risk factor codings were dichotomized into two categories: mentioned as present, or not mentioned as present (absent, mentioned but uncodable, not mentioned). Twelve raters were involved in the data collection (BC, n = 4; ON, n = 2; QC, n = 6) and each coded between 51 and 2,341 hearings (M = 848.67, SD = 708.28). Interrater reliability (IRR) of the HCR-20 codings was examined using 1,835 Review Board reports (27% of the hearing sample) associated with 573 individuals found NCRMD.3 For the Review Board reasons for decisions, the average kappa for the HCR-20 was 0.76 (H, κ = 0.83; C, κ = 0.73; R, κ = 0.67). According to Cicchetti and Sparrow (1981) this reflects good to excellent IRR (0.75–1.00 =

excellent; 0.60–0.74 = good; 0.40-0.59 = fair; < 0.40 = small).

The HCR-20 has strong empirical support for its association with violence (Douglas & Reeves, 2010), including within forensic psychiatric samples (see Douglas et al., 2014) and has been found to influence the Review Board decision process (Crocker et al., 2014). In the present analyses, we examined the effect of the H, C and R scale scores as a function of whether a re-hospitalization occurred.

Re-hospitalization

During their conditional discharge, 30%of the individuals were re-hospitalized (n = 415). These individuals returned to the hospital 1.56 times on average (SD = 0.84), which led to 644 hospitalization observations.

Outcome

Detention

The outcome of interest was the revocation of a conditional discharge. To clarify, we were interested in the details of the decision at the Review Board hearing that occurred after the hearing at which the individual received an initial conditional discharge. All individuals in the sample received an initial conditional discharge. A subset of the sample (30%) was re-hospitalized after being released to the community. Re-hospitalization can range from a few days (e.g., for observation or re-stabilization, followed by return to the community) to re-institutionalization at least until the next Review Board hearing. We examined the decision (likelihood to detain) at this next Review Board hearing, comparing those who had been re-hospitalized at least once since the previous hearing and those who remained in the community the entire time since the previous hearing. At this Review Board hearing, all disposition options are available. For example, an individual who was re-hospitalized could be given another conditional discharge or revert back to detention. Further, an individual who successfully remained in the community may continue with the conditional discharge, could be given an absolute discharge, or could be given a detention order if there was concern regarding current functioning and risk level. Following a conditional discharge decision, 21% of the individuals received at least one hospital detention decision (n = 282). For those who were re-hospitalized, they were detained on average 1.15 times (SD = 0.40) at hearings following the initial conditional discharge.

Analytic Strategy

In the present research design, some individuals are observed more than once during the observation period. In order to respect the assumption of observation independence, we included a random effect in the logistic regression at the individual level (Raudenbush & Bryk, 2002). To observe the difference in the decision process when a re-hospitalization occurred, interaction effects between the presence of re-hospitalization since the previous Review Board hearing and the dynamic factors were estimated. All coefficients presented are standardized to facilitate the comparison of the different factors.

Results

Table 2 compares the re-hospitalized group with those who successfully remained in the community after discharge. There were significant differences between the two groups across all variables, with the exception of index offense severity. The group that was re-hospitalized during discharge was younger, more likely to be diagnosed with a schizophrenia-spectrum disorder and less likely diagnosed with a personality disorder, were more likely to have engaged in a concerning behavior (e.g., substance use, violence, non-compliance) since the previous hearing and had more H, C, and R items reported as present.

Table 2. Comparison of discharged individuals as a function of the presence of at least one re-hospitalization

	Presence of at least one hospitalization post discharge						
	No		Yes		Total		
	n	*%*	*n*	*%*	*n*	*%*	*X2(df); p*
Province							47.08(2); < 0.001
Québec	676	70.7%	280	29.3%	956	100%	
Ontario	183	81.0%	43	19.0%	226	100%	
British Columbia	93	50.3%	92	49.7%	185	100%	
Female	177	75.3%	58	24.7%	235	100%	4.33(1); 0.038
Presence of psychiatric history	599	67.0%	295	33.0%	894	100%	8.51(1); 0.004
Diagnosis							
Psychotic spectrum	286	36.0%	508	64.0%	794	100%	2.61(1); 0.009
Substance abuse	332	56.4%	257	43.6%	589	100%	86.26(1); < 0.001
Personality disorder	304	57.9%	221	42.1%	525	100%	55.54(1); < 0.001
Presence of at least one behavior							
Substance use	183	42.4%	249	57.6%	432	100%	222.33(1); < 0.001
Non-compliance with Review Board conditions	242	41.5%	341	58.5%	583	100%	380.53(1); < 0.001
Violence	66	27.4%	175	72.6%	241	100%	247.10(1); < 0.001
Suicidal attempt or thoughts	25	35.7%	45	64.3%	70	100%	40.17(1); < 0.001
Non-compliance with medication	183	40.3%	271	59.7%	454	100%	276.65(1); < 0.001
Total	952	69.6%	415	30.4%	1367	100%	
	M	SD	M	SD	M	SD	Z(df); p
Age at the index offense	37.42	11.98	33.20	11.93	36.15	12.11	6.52(1); < 0.001
Severity of the index offense	4.59	1.16	4.55	1.14	4.58	1.15	0.21(1); 0.835
Number of hearings during discharge	1.69	1.04	3.15	1.68	2.14	1.43	17.58(1); < 0.001
Proportion of hearings with systematic evaluation	0.09	0.27	0.09	0.24	0.09	0.26	2.50(1); 0.012
Average number of HCR-20 items mentioned as present:							
Historical (out of 10)	3.87	1.83	4.71	1.78	4.13	1.85	7.58(1); < 0.001
Clinical (out of 5)	0.99	1.03	1.76	1.13	1.22	1.12	12.01(1); < 0.001
Risk management (out of 5)	0.37	0.64	0.57	0.67	0.43	0.66	8.45(1); < 0.001

Table 3 shows the results of a logistic regression predicting the Review Board decision to detain an individual who was previously conditionally released, with a specific focus on the effect of the presence of a re-hospitalization during this release. A number of factors were associated with the decision to detain following a conditional discharge. Individuals from Ontario were more likely to receive a detention following a conditional discharge than individuals from Québec. Individuals who had a psychiatric history prior to their NCRMD verdict, and who had a psychotic spectrum disorder or personality disorder, were more likely to be detained following a conditional release.

In contrast, when the treatment team submitted a systematic risk evaluation, the Review Board was less likely to detain the individual. With regards to behaviors since the previous hearing, committing a violent act during conditional discharge increased the likelihood of receiving a detention, while no other behaviors influenced the decision of the Review Board. The number of historical and risk items from the HCR-20 did not influence the decision process of the Review Board, whereas the number of clinical items mentioned as present at the hearing did have an impact. The number of clinical items mentioned as present was one of the strongest factors in the model, where an increase in the number of items was associated with a greater likelihood of a detention decision.

The Effect of the Re-hospitalization

Individuals who were re-hospitalized during their discharge were more likely to be detained at the next hearing. However, as shown by the interaction effects reported in Table 2, this re-hospitalization did not change the Review Board decision process (e.g., regarding behaviors since last hearing and H and R items), except for the clinical items of the HCR-20. Figure 1 presents the predicted probability of detention as a function of the presence of re-hospitalization and the number of clinical items mentioned as present. From this figure, we first observe that individuals who had few dynamic clinical items noted as present (i.e., lack of insight, negative attitudes, active symptoms of mental

Table 3. Logistic regression predicting detention decision

	Model I - Main effects		Model II - Interaction effects	
	b	*SE*	*b*	*SE*
(Intercept)	–5.55	0.56***	–5.37	0.54***
Static factors				
Province (ref = Québec)				
Ontario	4.39	0.54***	4.16	0.51***
British Columbia	0.31	0.43	0.29	0.41
Age at the index verdict	–0.03	0.15	–0.02	0.15
Female	0.01	0.14	0.00	0.14
Severity of the index offense	0.17	0.14	0.14	0.13
Presence of psychiatric history	0.34	0.15*	0.34	0.14*
Diagnosis				
Psychotic spectrum	0.33	0.15*	0.29	0.15*
Substance Abuse	0.32	0.16	0.28	0.16
Personality disorder	0.46	0.16**	0.42	0.16**
Diagnosis not specified	0.04	0.13	0.04	0.13
Dynamic factors				
Number of past hearings	–1.16	0.17***	–1.13	0.16***
Hospitalization	1.08	0.14***	0.98	0.15***
Presence of systematic evaluation	–0.27	0.12*	–0.26	0.11*
Behavior since the last hearing				
Violence	0.73	0.12***	0.84	0.14***
Substance use	–0.19	0.14	–0.24	0.16
Suicidal attempt or thoughts	–0.01	0.09	–0.08	0.16
Non-compliance with Review Board conditions	0.07	0.16	0.19	0.17
Non-compliance with medication	0.25	0.11*	0.18	0.13
Number of HCR-20 items mentioned as present				
Historical (out of 10)	–0.02	0.16	0.11	0.19
Clinical (out of 5)	1.05	0.16***	1.03	0.18***
Risk (out of 5)	0.20	0.11	0.07	0.12
Interaction effects				
Hospitalization × violence			-0.12	0.07
Hospitalization × suicidal			0.06	0.09
Hospitalization × conditions			-0.20	0.13
Hospitalization × substance			0.12	0.10
Hospitalization × medication			0.02	0.09
Hospitalization × H items			-0.19	0.12
Hospitalization × C items			0.40	0.13**
Hospitalization × R items			0.07	0.09
Random effect			*Variance*	*SE*
Individual			6.18	2.49
Log-likelihood (AIC)	-670.0 (1385.9)		–660.5 (1383.0)	

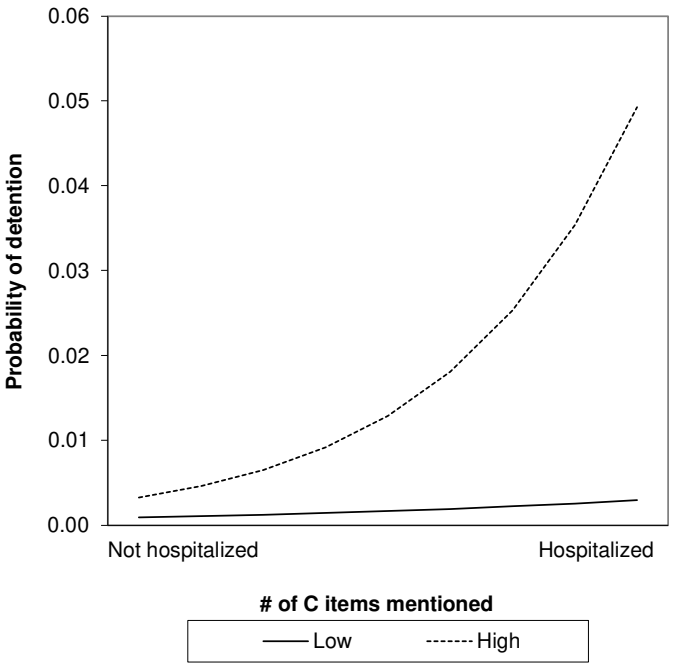
***p < 0.001,**p < 0.01,*p < 0.05. AIC, Akaike information criterion.

illness, impulsivity, unresponsive to treatment) were less likely to receive a detention decision than those who had a higher number of C items. In addition, the figure shows that the effect of a higher number of C items increased substantially if a re-hospitalization occurred since the previous Review Board hearing. The Review Board was more sensitive to C items in their decision process when individuals were hospitalized.

DISCUSSION

Consistent with previous research (McDermott & Thompson, 2006; McDermott et al., 2008), including findings from the NTP (e.g., Crocker et al., 2014; Wilson et al., 2015), we found that clinical items that capture recent functioning were central to Review Board decision-making. A psychiatric history, engaging in violence, and a higher number of C scale items from the HCR-20 (Webster et al., 1997) were associated with a greater likelihood to detain an individual following a conditional discharge,

Figure 1. Predicted probability of detention as a function of the presence of re-hospitalization and the number of clinical (C) items mentioned



whereas the use of a systematic risk assessment was associated with a lesser likelihood of being detained (Crocker et al., 2014). However, when re-hospitalization subsequent to conditional discharge was considered, only the C scale had an association with the subsequent Review Board decision.

Many of the factors that we found to be associated with a decision to detain a person found NCRMD following a conditional discharge are consistent with findings from research examining factors associated with success, or failure, when forensic patients return to the community. Research has shown that previous psychiatric hospitalizations, schizophrenia-spectrum diagnosis, and personality disorder diagnoses are associated with poorer outcomes while on conditional discharge (Bertman-Pate et al., 2004; Manguno-Mire et al., 2014; Parker, 2004). In this study, we also found that individuals with these same characteristics were more likely to be detained following a discharge, suggesting that, consistent with the extant literature, Review Boards are weighing valid risk factors when making disposition decisions.

Interestingly, the use of a systematic risk assessment was associated with a lower likelihood of being detained. Systematic risk assessment tools ensure that, at a minimum, empirically supported and/or clinically relevant risk factors are considered when assessing an individuals' level of risk. Perhaps the use of a risk assessment tool that captures multiple risk factors prevents any one factor, such as index offense severity, from overly influencing Review Board decision-making. Further, we know from over three decades of research that the use of structured and empirically validated risk assessment tools is superior to that of unstructured clinical judgments (Ægisdóttir et al., 2006; Guy et al., 2015; Heilbrun, 2009; Heilbrun, Yasuhara, & Shah, 2010). The presence of a comprehensive report might also give the Review Board more confidence in the quality of the clinical risk assessment, leading to greater comfort with a less restrictive disposition. Thus, the lack of evidence that the expert's report made use of a structured risk assessment tool may result in a Review Board making a more conservative decision, such as detain, if there is any doubt. In any event, only a minority of reports were found to rely on structured risk assessment measures. Thus, our findings emphasize the need to further integrate systematic risk assessment tools and practices into clinical and Review Board decision-making.

The Influence of Historical vs. Dynamic Factors on Review Board Decision-making

Our previous work with the NTP demonstrated that historical factors on the HCR-20 (Webster et al., 1997) were associated with conditional discharge decisions (Crocker et al., 2014). As Crocker et al. (2014) noted, static factors carried more weight in decision-making early on, but over time, more dynamic factors were considered. Due to the overlapping sample, it is not surprising that our results are consistent, where we found that the C scale was associated with decisions following a conditional discharge. Thus, the longer an individual is in the care of the forensic system and under the jurisdiction of the Review Board, the less their prior history influences Review Board dispositions and

the more their current clinical presentation is taken into consideration. The findings are also in line with a growing body of research evidence, which has demonstrated the importance and effectiveness of dynamic variables for short-term assessments of risk and informing treatment and risk management decisions (Chu, Thomas, Ogloff, & Daffern, 2013; Wilson et al., 2013). However, there continues to be a lack of attention regarding dynamic factors focused on the patient's future circumstances and the context they will be in upon return to the community (e.g., future plans, support, stresses), such as those captured by the R-scale of the HCR-20 (Webster et al., 1997).

Silver (2000) referred to the tendency to focus on individual level explanations for violence among persons with mental disorders as the "individualistic fallacy". Consistent with that perspective, there has been a tendency to focus on internal factors for risk (e.g., psychotic symptoms) versus contextual factors, external stressors and triggers, and structural/neighborhood factors in the risk assessment field (e.g., poverty, crime, substance abuse, unemployment, antisocial peers/family; see Kroner, Gray, & Goodrich, 2011; Silver, 2000). However, research has demonstrated the influence of context on violence and offending. For instance, Swanson et al. (2002) found that being homeless and from an area with community violence were predictive of assaultive behavior in the previous year in a sample of patients with severe mental illness. Our current findings are further evidence that we may be neglecting to consider the dysfunctional neighborhoods and otherwise challenging relationships and environments that many mentally ill individuals return to after leaving hospital. Incorporating context into a structured risk assessment may result in a more idiographic assessment (Kroner et al., 2011), potentially allowing for a more individualized and specific treatment and management approach. Again, the use of a structured risk assessment tool could help to ensure that all facets of an individuals' risk are considered when rendering a disposition.

Behaviors since Previous Hearing

Of the behaviors captured since the previous hearing, only violence was associated with the decision to detain at the following hearing. That violence was associated with a detention decision in general was not surprising; using the same dataset from the NTP, Crocker et al. (2014) previously reported that engaging in violent behavior significantly decreased the likelihood of any type of release. However, it was surprising that non-compliance with medication or Review Board conditions was not associated with future decisions. Compliance with psychiatric treatment has been found to play a role in decision-making in prior studies (Crocker et al., 2014; McDermott et al., 2008). Crocker et al. (2014) found that non-compliance with Review Board conditions decreased the likelihood of receiving an absolute discharge, and non-compliance with medication decreased the likelihood of being conditionally discharged. Crocker et al. (2014) considered all Review Board hearings, whereas we focused on the Review Board hearings following a conditional discharge. It is possible that the fact that an individual had a previous conditional discharge, suggesting that there was some history of complying with treatment, provides the individual with some leeway when there is an incident of non-compliance.

Future Research

Additional research in this area is needed to better understand how mental health tribunals conceptualize a patient's presentation, risks, and needs when they are returned to hospital. Our findings suggest that the Review Boards are relying on a comprehensive understanding of the patient's clinical presentation, but the extent to which dynamic clinical items (as compared with historical and risk management items) from the HCR-20 are predictive of further re-hospitalizations and/or more salient adverse events (e.g., new charges, suicide) remains to be explored in this particular context/population.

A particularly interesting finding from the present study that warrants further exploration is that patients who were assessed using a structured risk assessment tool were more likely to receive a conditional discharge than patients whose reports did not contain evidence of a structured risk assessment tool. The results need to be replicated in other samples and expanded before we can draw firm conclusions, but the findings have potentially important implications for patients. We postulate that a report from the attending clinician/treatment team that is informed by a structured measure like the VRAG (Quinsey et al., 1998) or HCR-20 (Webster et al., 1997; HCR-20V3, Douglas, Hart, Webster, & Belfrage, 2013) is more compelling for the Review Board. Future studies should determine how the Review Board evaluates reports with and without evidence of reliance on structured measures. We would hypothesize that the assessor who uses an empirically supported risk assessment tool may appear more knowledgeable about the risk assessment literature or the report may be better organized, coherent and persuasive; all of which might increase the confidence of the Review Board. A combination of qualitative and quantitative research might be a particularly informative means of testing these hypotheses.

An additional avenue for future research should focus on the reason for, and outcomes of, a return to hospital. There are a multitude of reasons why a person with an NCRMD finding might be re-hospitalized when on conditional discharge, whether it be a preventative action for someone who appears to be decompensating or a reaction to engaging in adverse behavior (criminal or non-criminal). Future research should more closely examine the proactive versus reactive reasons for re-hospitalization. Incorporating the use of health data, in combination with forensic files and police files, may provide a richer picture of the re-hospitalization process, the factors associated with the decision to re-hospitalize, and the impact that a return to hospital may have for health and criminal justice outcomes.

Strengths and Limitations

This study extended our previous research (Crocker et al., 2014; Wilson et al., 2015) to consider the impact of re-hospitalization and how this influences the factors associated with future Review Board decisions. The study involved a large sample from multiple sites in Canada and we obtained a good level of IRR in our codings. Further, the coding of behaviors and risk factors reflects what actually occurred since the previous hearing and the extent to which the presence of these risk factors influences the Review Board in their decision-making.

One of the primary limitations of this study is not including those given a “detention with conditions” disposition from the Ontario sample, where some individuals are permitted to live in the community while still under a detention order. The decision to not include this group was based on the fact that this disposition is not explicitly included in the legislation, it does not appear to be commonly used outside of Ontario, and there may be differences between those subject to detention with conditions dispositions versus conditional discharges; we therefore opted to focus on those specifically given a conditional discharge.

As this was an archival study, we are limited by the information that was available to us in the Review Board files. Some information discussed during Review Board hearings may not have been captured in the files. Finally, the current study relied on files from 2000 to 2008 and it is possible that practices may have changed in recent years, such as a greater use of structured risk assessment tools.

Conclusions

Our results suggest that dynamic factors focused on the individual’s recent functioning, specifically indicators of mental health, are heavily weighted by the Review Boards. This was true, regardless of whether the individual was re-hospitalized during conditional discharge, although they did carry greater weight for an individual who was

rehospitalized. The consideration of clinical dynamic items is consistent with the literature on imminent risk and is in line with the NCRMD legislation. In addition, our results show the importance of using an empirically supported risk assessment measure. Unfortunately, the findings also demonstrate that there remains a need to continue to support the implementation of structured risk assessment into practice. A continued focus on approaches to integrate structured approaches to risk assessment will assist Review Boards in making all decisions, including conditional discharge decisions that provide persons found NCRMD with the vital opportunity to start reintegrating into the community.

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