

Forensic Risk Management with Dynamic Risk Tools at the Royal

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Mental Health - Care & Research
Santé mentale - Soins et recherche

Objectives

- Risk management via dynamic risk tools at the Royal
- Administration use of risk tools to make decisions
- Challenges with team-based risk management (the Royal's experience)

186 **bed** **state-of-the-art**
mental health
facility

88 **bed** **24 recovery beds +**
64 long term care beds
facility

+ **7** **community teams** Carlingwood
Mall

1st hospital
in Canada
to open under
P3/AFP concept
in 2006

Brockville
Mental Health
Centre

163 inpatient **beds** ^{63 forensic}
_{100 STU}

167 **beds** homes for
special care
in the community

4 Forensic Intensive
Treatment Team (FITT) beds
+ **2** community teams

**A specialized psychiatric facility
located in Brockville**

Risk Management Tools at the Royal

HAMILTON ANATOMY OF RISK MANAGEMENT-FORENSIC VERSION (HARM-FV)
©Chaimowitz & Mamak (2006)

Name:	Dx:	PCL-R:	IQ:	Long Term Estimate of Risk
Index Offences:	Date:	VRAG:	Other:	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Completed by:	Discipline:	HCR20:	Other:	

Historical Violent Offences	Dates	Weapon	# Charges

Historical Non-Violent Offences	Dates	# Charges

Historical Risk Factors ✓
MMD:
Personality Disorder:
Substance Use:
Cognitive Deficits:
Other (eg. suicidal behaviour):
Past Target(s):

AIS Totals				Risk Factors				Change				Urine Screens	
Start date:												Dates/Results:	
	This Month	Past Month	Year to Date	Rule Adherence		0	1	2	3				
9				Insight – illness									
8				Mood Disorder									
7				Psychotic Symptoms									
6				Impulse Control									
5				Social Support									
4				Program Participant									
3				Substance Abuse									
2				Med Non-Adherence									
1				Antisocial Attitude									
0				Other:									
				Other:									

Potential Behaviours	Rationale	Potential Target(s)	Duty to Protect? Yes <input type="checkbox"/> No <input type="checkbox"/>

Clinical Likelihood Of Violence	Immediate (days): with professional support High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	Short-Term (weeks): with professional support High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
	Immediate : released & no professional support High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	Short-Term : released & no professional support High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>

Risk Management: Consider Modifiable and Non-Modifiable Variables	Treatment Plan	Interventions	Team Member	Response	Privilege/Obs.

(Chaimowitz & Mamak, 2011)

The Le Royal
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Brockville Risk Checklist
Interdisciplinary clinical risk assessment and management

Name: _____ Chart#: _____ Gender: _____ Unit: _____ DOB: www / mm / dd
Date of Assessment: www / mm / dd Initial Assessment ☐ Follow-up Assessment ☐

Risk Factors	HO	SH	EO	Protective Factors
1. Interpersonal aggression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Social support <input type="checkbox"/>
2. Emotional dyscontrol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Social skills <input type="checkbox"/>
3. Specific threats of violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Resilient outlook <input type="checkbox"/>
4. Access to potential victims	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Motivation to change <input type="checkbox"/>
5. Non-engagement with treatment team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total Protective Score <input type="checkbox"/>
6. Poor compliance with medication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Level of Neglect Scale
7. Psychosocial stressors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A. Inadequate care of living space <input type="checkbox"/>
8. Feelings of loss of control over life events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	B. Inadequate attention to nutritional needs <input type="checkbox"/>
9. Thoughts/threat of suicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	C. Inadequate attendance to personal hygiene <input type="checkbox"/>
10. Control override symptoms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D. Indiscriminate smoking <input type="checkbox"/>
11. Vocational difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	E. Medical concerns: <input type="checkbox"/>
12. Inadequate money management skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total Neglect Score <input type="checkbox"/>
13. Indiscriminate giving away of personal effects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Incidents Over Reporting Period #
14. Indiscriminate sexual interaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Physical aggression <input type="checkbox"/>
15. Maladaptive personality traits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Verbal aggression <input type="checkbox"/>
Clinical Override	Total Score <input type="checkbox"/>	Level of Risk <input type="checkbox"/>	Specificity <input type="checkbox"/>	Self harm (incl. threats/attempts) <input type="checkbox"/>
YES NO				Exploitation by others <input type="checkbox"/>
Descr: _____				Exploitation of others <input type="checkbox"/>
Date: www / mm / dd				Substance use <input type="checkbox"/>
				Rule violation (contraband, late check-in) <input type="checkbox"/>
				Elopement <input type="checkbox"/>
				Other: <input type="checkbox"/>
				Total Incidents <input type="checkbox"/>

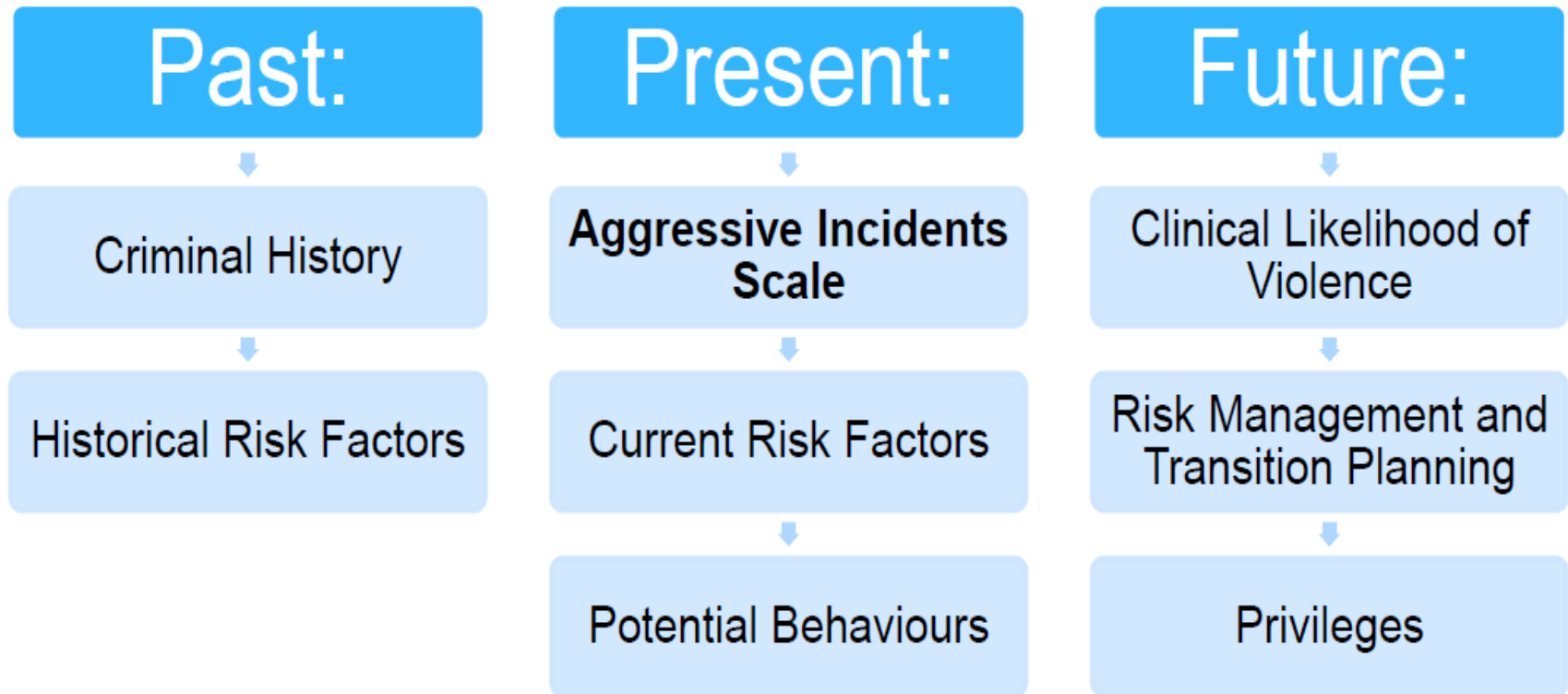
Target	Responsible Staff	Intervention	Review Date
HO			
SH			
EO			
Neglect			

Signatures of Team Members at Case Conference

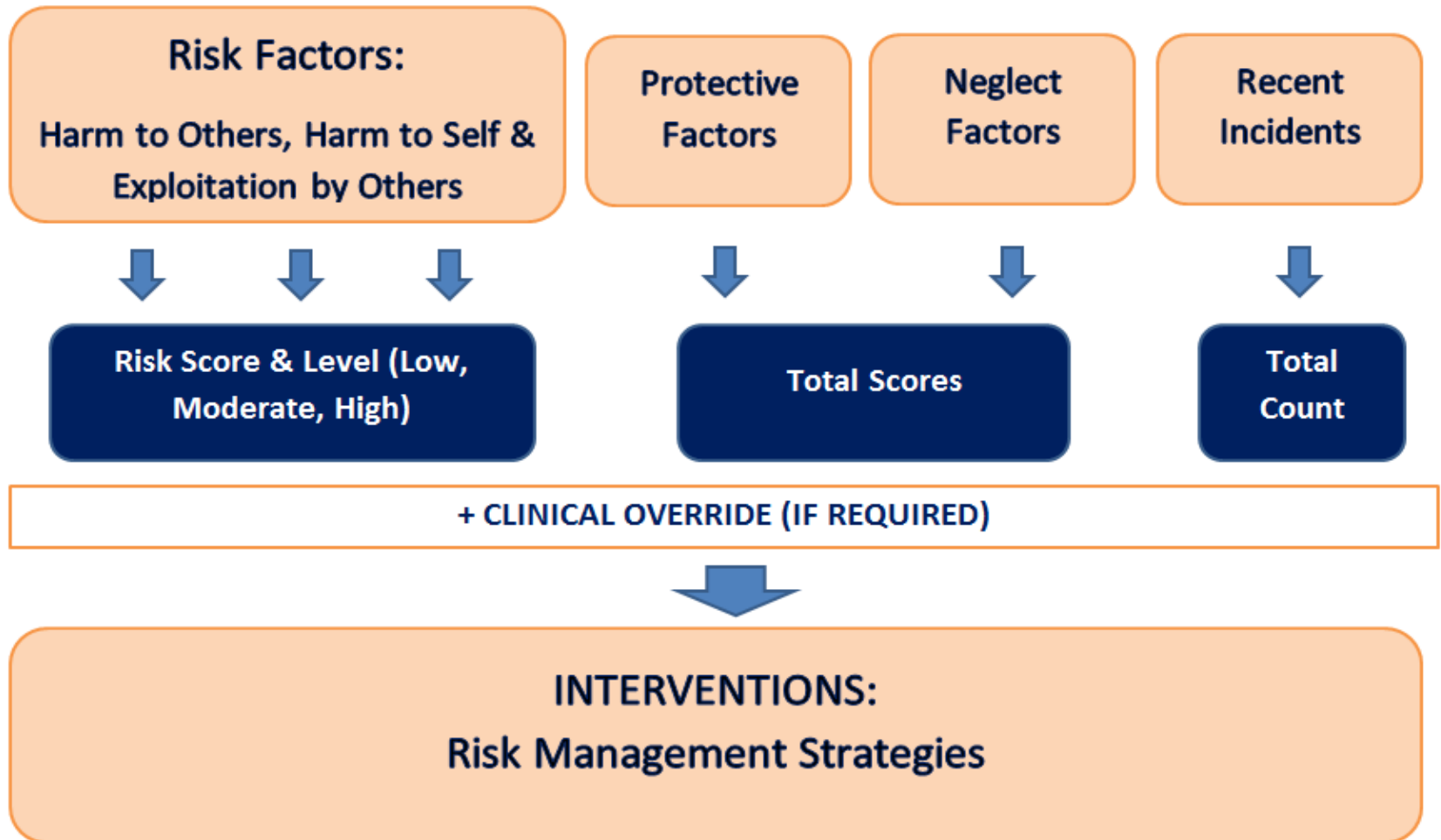
Physician: _____ Nursing: _____ SocW: _____ OT: _____ Rec: _____
Psychology: _____ Prog.Nur: _____ Voc: _____ Other: _____ Other: _____

(Ahmed et al., 2012)

Hamilton Anatomy Risk Management




Brockville Risk Checklist 4



Published Literature

Article

Validating the Hamilton Anatomy of Risk Management–Forensic Version and the Aggressive Incidents Scale

Assessment
1–14
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DOI: 10.1177/1073191116653828
asm.sagepub.com


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Abstract

The Hamilton Anatomy of Risk Management–Forensic Version (HARM-FV) is a structured professional judgement tool of violence risk developed for use in forensic inpatient psychiatric settings. The HARM-FV is used with the Aggressive Incidents Scale (AIS), which provides a standardized method of recording aggressive incidents. We report the findings of the concurrent validity of the HARM-FV and the AIS with widely used measures of violence risk and aggressive acts, the Historical, Clinical, Risk Management–20, Version 3 (HCR-20^{V3}) and a modified version of the Overt Aggression Scale. We also present findings on the predictive validity of the HARM-FV in the short term (1-month follow-up periods) for varying severities of aggressive acts. The results indicated strong support for the concurrent validity of the HARM-FV and AIS and promising support for the predictive accuracy of the tool for inpatient aggression. This article provides support for the continued clinical use of the HARM-FV within an inpatient forensic setting and highlights areas for further research.

Keywords

violence risk assessment, violence risk management, violence, aggression, HARM-FV, AIS

INTERNATIONAL JOURNAL OF FORENSIC MENTAL HEALTH, 12: 274–286, 2013
Copyright © International Association of Forensic Mental Health Services
ISSN: 1499-9013 print / 1932-9903 online
DOI: 10.1080/14999013.2013.857740



Assessing Short-term, Dynamic Changes in Risk: The Predictive Validity of the Brockville Risk Checklist

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In the present study, we examined the predictive utility of the Brockville Risk Checklist (BRC), a structured assessment tool for clinical care planning, using a semi-parametric regression technique. We examined BRC scores and the frequency and type of incidents (aggression, noncompliance, etc.) over 13 assessments for 121 psychiatric patients at a medium-secure forensic unit. Most patients were male (95%), on average 40.9 ($SD = 13.0$) years old, and diagnosed with a psychotic disorder (78%). Generalized estimating equation (GEE; Liang & Zeger, 1986) modeling was used in this study to determine if changes in dynamic risk scores over time predicted outcomes (presence or absence of an incident) during the approximately six-week follow-up period. Results showed that scores on the Harm to Others scale assessed at one case conference significantly predicted changes in aggressive and total incidents recorded in the subsequent case conference. The BRC shows promise as a dynamic measure of inpatient aggression, predicting verbal or physical incidents an average of six weeks later.

Keywords: dynamic risk, risk assessment, aggression, psychiatric forensic inpatients, time series

How the Royal uses the BRC4 & HARM

- Structured Professional Judgment tools
- Scored by a treatment team
- Foster risk discussion (risk management)
- Quick to complete
- Makes a final estimate of risk for patient
- Used on routine basis (~1-2 months/patient)
- Used by hospital administration to make treatment decisions

Why is risk management important to me?

- 1/5 in patients commit an act of physical violence as an inpatient (Meta-analysis; Iozzino et al., 2015)
- Elopement rates from a secure forensic psychiatric facility in Ontario is as high as 14.4% over 2 years (Wilkie et al., 2014)
- Overlap between factors associated with eloping from secure settings with violence risk (Quinsey et al., 1997)
 - E.g. active psychiatric symptoms, antisocial attitude
- **Balancing safety and liberties when making administrative decisions**

Why is risk management important to me?

- The *Mental Health Act* defines “**Officer in Charge**” or “OIC” as “the officer who is responsible for the administration and management of a psychiatric facility”.
- OIC is delegated the authority to direct that restrictions on a patient’s liberty be increased or decreased within the limits set out in the Disposition Order.

Administration's use of Risk Tools

- Completed tools regularly reviewed by management
- Recent scores included in annual Review Board hospital report
- Accompany patient privilege requests
 - Decisions are directly impacted by the patient's scores
- Assist in decisions to transition patient

Privileges for patients on Disposition Orders

- OIC can work within the parameters of the Disposition Order determined by Review Board
- May include access to hospital grounds or community under increasing levels of supervision
 - Escorted
 - Accompanied
 - Approved persons
 - Passes indirectly supervised

Administration's use of Risk Tools: *Privilege Requests*

1. Team-scored BRC4 or HARM sent to hospital administration with patient privilege request
2. Hospital administration reviews request in junction with risk scores, recent incidents
3. Administration may request a risk mitigation strategy/cost-benefit explanation before approval
4. Support or recommend request delivered to team and patient

Aligns with validated approach to reducing elopement from a secure forensic facility (Simpson et al., 2015)

Summary of Recent Research Results on BRC4 & HARM (2014-2017)

Satisfactory relationship

between similar items on each tool

($T_b = 0.282$ to 0.589)

Risk items on both tools had **fair-moderate predictive abilities** on future incidents (e.g. aggression, rule violation)

(AUC = .70-.96)

Risk items more effective at **detecting patient with 4+ incidents** over short-term vs. patient with 1-3 incidents

Summary of Recent Research Results on BRC4 & HARM (2014-2017)

- Qualitative results
 - Unplanned
 - Valuable
- Unbiased observations of team scoring
 - Between *treatment teams*
 - Between both *campuses*
- Highlighted **challenges** and **areas for improvement** with team-based, routine risk management at Royal

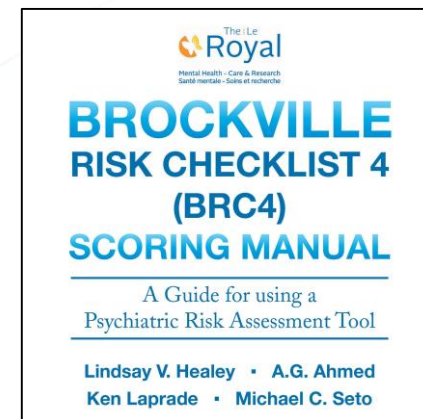
Challenges with Team-Based Risk Management

- Team buy-in
- Risk Coordinator at Royal campus
 - Advantages
 - Disadvantages
- Inconsistencies between different treatment teams at Brockville campus
 - No consistent Risk Coordinator (or other staff) present
 - Scoring habits become entrenched

Challenges can inhibit important upstream administrative decisions!

Outcomes of Evaluation and Next Steps

- Scoring manual for BRC4 (2016)
 - Regularly referenced during scoring
 - Enhances consistency
 - Improved definitions based on feedback
- Ongoing research collaboration with SJHH (authors of HARM and recent eHARM)
 - Second validation study of both tools
- Pending program decisions about risk management at Royal
 - Empirically driven



Thank you – Questions?

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