Forensic Risk Management with Dynamic Risk Tools at the Royal

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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 facility
24 recovery beds + 64 long term care beds
+ 7 community teams Carlingwood Mall

1st hospital in Canada to open under P3/AFP concept in 2006
Brockville Mental Health Centre

163 inpatient beds

167 beds

63 forensic beds

100 STU

4 homes for special care

in the community

2 Forensic Intensive Treatment Team (FITT) beds

community teams

A specialized psychiatric facility located in Brockville
Risk Management Tools at the Royal

(Chaimowitz & Mamak, 2011)  (Ahmed et al., 2012)
Hamilton Anatomy Risk Management

Past:
- Criminal History
- Historical Risk Factors

Present:
- Aggressive Incidents Scale
- Current Risk Factors
- Potential Behaviours

Future:
- Clinical Likelihood of Violence
- Risk Management and Transition Planning
  - Privileges

Messina, K., Mullally, K., Mamak, M., Chaimowitz, G., Moulden, H. (2017)
Brockville Risk Checklist 4

Risk Factors:
Harm to Others, Harm to Self & Exploitation by Others

Protective Factors

Neglect Factors

Recent Incidents

Risk Score & Level (Low, Moderate, High)

Total Scores

Total Count

+ CLINICAL OVERRIDE (IF REQUIRED)

INTERVENTIONS:
Risk Management Strategies
Published Literature

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

Helen ChagOGiogiS
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Steve F. Michel and Michael C. Seto
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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-security forensic unit. Most patients were male (95%), on average 40.9 (SD = 13.0) years old, and diagnosed with a psychotic disorder (79%). 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

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

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Article

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-20v3) 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 period) 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
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
  
  $(T_b = 0.282 \text{ to } 0.589)$

- 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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References


