

# The eHARM: The Development of a Nimble Violence Risk Assessment Tool

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## ABSTRACT

The assessment of risk of violence and self-harm have become critical skills required of mental health professionals, particularly those working in forensic settings. Although a number of measures exist that assist in predicting risk in the long term, there are few tools that offer assistance with short-term risk. Aggression and violence are issues faced by most mental health facilities, but the discussion of inpatient risk assessment and management is rarely had in psychiatric literature. This paper will discuss the implementation of the Hamilton Anatomy of Risk Management (HARM): a tool developed at St Joseph's Healthcare, Hamilton. Because aggression is often viewed as an expected occurrence in an inpatient setting, not only is documentation of incidents poor, but the discussion of risk and risk-related factors also tends to be limited. The HARM assesses risk in both in- and outpatient settings. The HARM is a practical method of not only evaluating a patient's risk of violence but also serves to guide treatment planning and risk management, including privilege determination. The HARM has been in use for several years. This paper will present an adaptation of the HARM tool that allows for innovative data entry, data output, and chart production, as well as incorporating an educational component. An automated risk management tool such as this will allow for improved quality of care and improved safety for patients and staff.

## INTRODUCTION

### Purpose of the eHARM Tool<sup>1</sup>

Risk factors for violence in inpatient settings differ from risk factors involved in prediction of violence in the community.

Few tools assess short term risk within an inpatient setting

The HARM was developed to fill this gap and has now been applied to other settings

### What is the eHARM?<sup>1</sup>

A structured clinical judgment tool that guides the assessor(s) to formulate opinions regarding risk of violence.

Risk assessment is seen as a process as opposed to a calculation

A tool that incorporates both static and dynamic factors in assessing risk as reflected in the literature

It is recognized that risk can potentially increase or even decrease depending on dynamic factors and rehabilitative efforts.

It is also recognized that risk in the short term can be different than risk in the long term.

Created to be used in a team environment

### Key Features of the eHARM

The eHARM is a tool that incorporates discussion about how to best manage risk

The HARM has Four Stages (past, present, risk prediction, and future-risk management) and utilizes the Aggressive Incidents Scale (AIS) to document aggressive incidents

Several versions were created: General (GV), Forensic (FV), Youth (YV) and Community (CV)

We have developed an electronic adaptation of the eHARM (FV), shown in the next panel that is powered by analytics.

## OBJECTIVES OF THE eHARM TOOL

- Improve documentation
- Improve communication (reliability of documentation)
- Improve discussions of risk
- Improve risk management
- Improve patient outcomes

## ANALYTICS IN PSYCHIATRY

### Aggressive Incidents Scale (AIS)<sup>1</sup>

Developed to track and evaluate aggressive behaviours

Simple to use (enhances compliance)

Simple to Interpret (easily surmise the degree of aggression displayed by patient)

Graded on a 9-point system on behaviours that require verbal, physical or no intervention

Level	Incident	Description
9	Critical Incident – Possible Life and Death	Serious violent assault or sexual assault. The victim requires medical attention.
8	Violent Unprovoked Assault	Impulsive interpersonal assault in which no apparent precursors are identifiable
7	Violent Assault	Aggression involves physical contact with another person
6	Push/Shove	Clearly aggressive push or shove
5	Destruction of Property	Aggression directed at property
4	Improper Physical Contact	Behaviour not an assault but physical contact inappropriate
3	Intimidating, Threatening, Personal Space Violated	Person's body language or words are threatening in nature
2	Intimidating, Raised Voice	Person is verbally intimidating, possibly yelling and possibly utilizing profanities
1	Rude, Argumentative	Person is being rude, argumentative, and possibly challenging rules or staff's authority

### Overview of the eHARM Tool

#### Historical Risk Factors

For selected historical risk factors, details must be selected from a drop-down list.

**\*Historical Risk Factors**

Please select all that apply:

Major Mental Disorder ☒ Details: Substance Induced Psychotic Disorder

Personality Disorder ☐

Substance Use ☒ Alcohol

Cognitive Deficits ☐

Other (Please Specify) ☐

Other (Please Specify) ☐

Other (Please Specify) ☐

Details: Cluster B Mood Antisocial Personality Disorder Borderline PD Narcissistic PD Cluster A Mood Paranoid PD Schizoid PD

Details: Psychotic Symptoms Alcohol Cannabis Hallucinogens Delirium Opioid Stimulant Sedative, Hypnotic, Anesthetic

Details: Delirium Alzheimer's Disease Frontotemporal Lobar degeneration Lewy Body Disease Vascular Disease Prion Disease Traumatic Brain Injury Substance/medication use

#### Current Risk Factors

For each selected risk factor, Status and Change must be selected from a drop-down menu.

**\*Risk Factors**

Please select all that apply:

Rule Adherence ☒

Insight-Illness ☒

Mood Symptoms ☒

Psychotic Symptoms ☒

Impulse Control ☒

Program Participation ☒

Substance Abuse ☒

Med Non-Adherence ☒

Attitude/Cooperation ☒

Stress Management ☒

Anger Management ☒

Family Support ☒

Peer Influence ☒

Other ☐

**Risk Factor Status**

Managed ☒

Monitor ☒

Needs Improvement ☒

**Change**

Same ☒

Better ☒

Worse ☒

#### Potential Behaviours

Potential Behaviours	Primary Rationale	Potential Gender Target	Potential Victim Target	Duty to Protect?
Physical Aggression	Past Behaviour	Indiscriminate Gender	Staff	<input type="radio"/> Yes <input checked="" type="radio"/> No
				<input type="radio"/> Action Taken? <input type="radio"/> Yes <input checked="" type="radio"/> No

Physical Aggression: Verbal Aggression, Sexual Aggression/behaviour, Robbery, Arson

Past Behaviour: Current Sexual Isolation, Current Behaviour, Psychotic Content, Current Conflict, Dysfunctional Relationship

Hates: Females, Indiscriminate Gender, Serious Property Damage

Staff: Known Persons, Children, Stranger, Acquaintance, Family Members, Indiscriminate/Anyone, Serious Property Damage

#### Risk Management

All Current Risk Factors that 'Need Improvement' will be highlighted at the top of the Risk Management Section

**\*Risk Management**

**Risk Factors that Need Improvement: Substance Abuse**

Risk Factor	Treatment Plan / Intervention	Date Started	Status	Team Member	Response
Psychotic Symptoms	Medication	1-Sep-2015	Continuing	Dr. C	Med. Adherent
Substance Abuse	Substance Abuse Program	10-Oct-2015	Continuing	Dr. A	Engaged and attending

Privileges: No off ward privileges

Stressors/Destabilizers: Lack of privileges

Date of Next HARM Ax: 10-Jan-2016

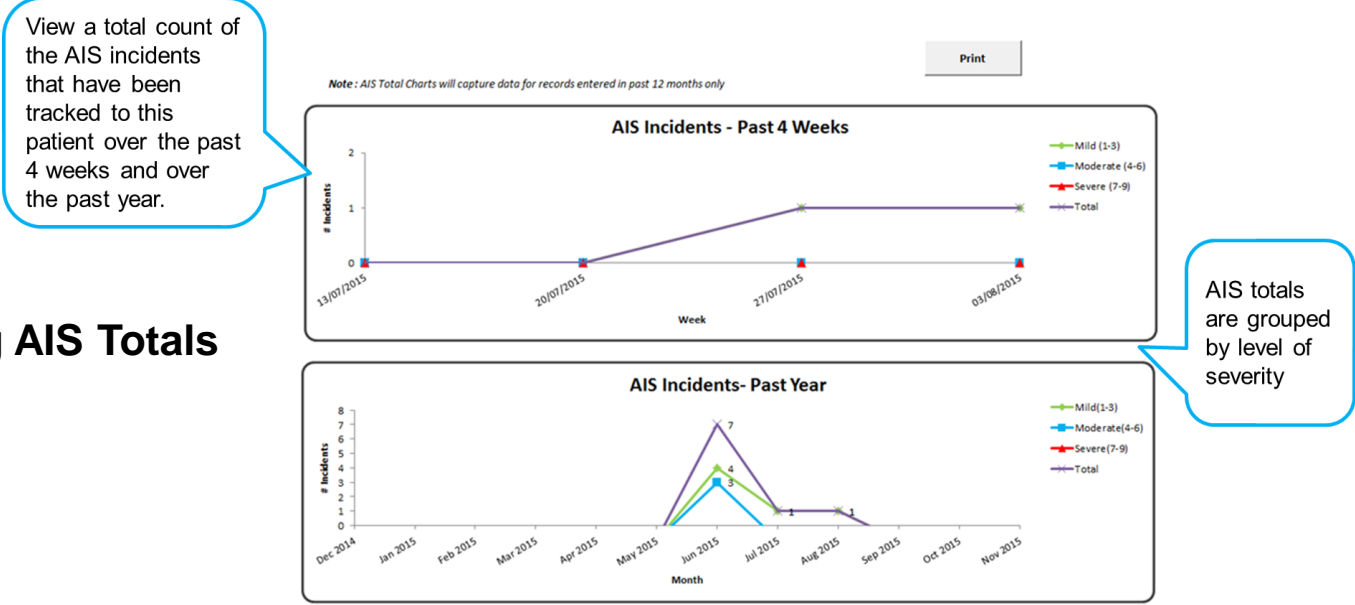
Stressors/Destabilizers must be listed here. If none exist, type 'None'

The date of Next HARM Risk Assessment must be entered here

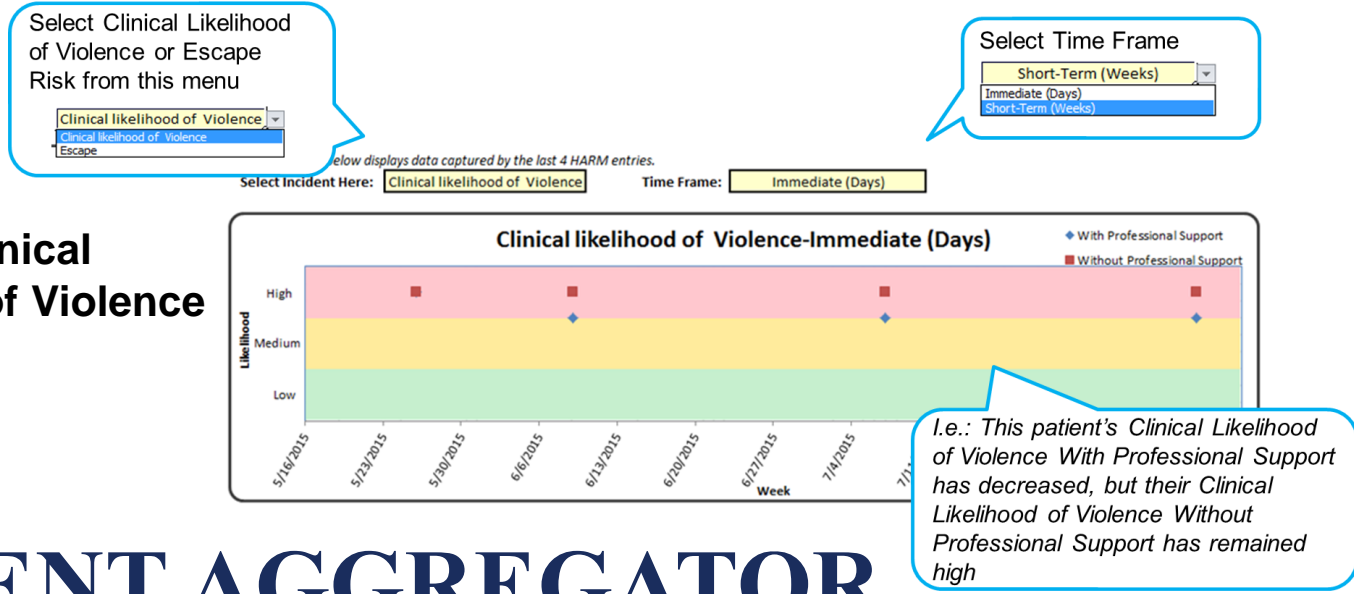
## PATIENT ANALYTICS

Electronic adaptation of the eHARM tool allows a patient's performance and risk factors to be tracked over time

### Tracking AIS Totals



### Tracking Clinical Likelihood of Violence

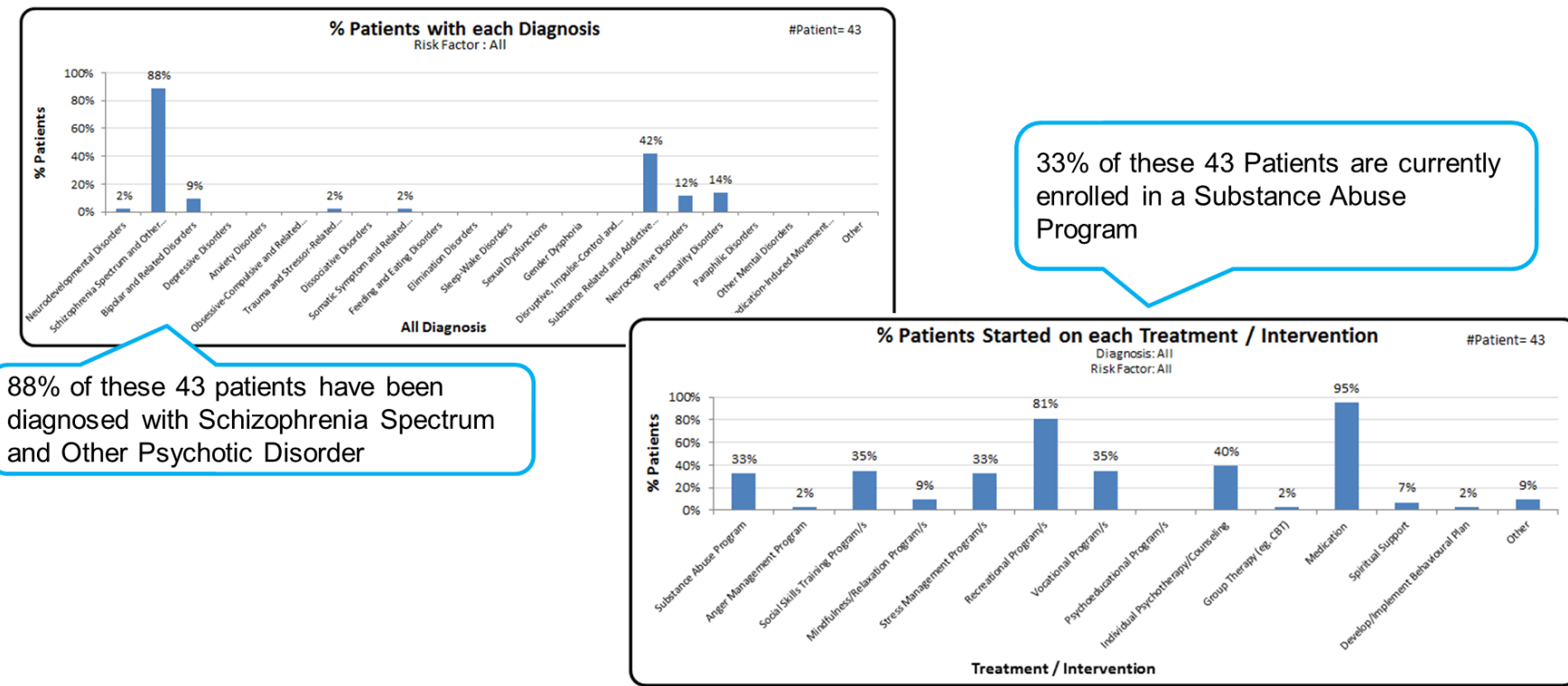


## PATIENT AGGREGATOR

Allows multiple eHARM reports to be loaded into the Aggregator

Observe trends and treatment patterns across multiple de-identified patients

Can be used for research purposes



## CURRENT STATUS & CONCLUSIONS

### Utility

Users indicate improved team meetings

Assisted in educating staff about variables and issues related to risk

### AIS Reliability<sup>1</sup>

Forensic psychiatric staff (nurses, occupational therapists, social workers, recreation staff, psychiatrists; ICC1 = 0.93) already familiar with the AIS tool

Inexperienced or novice staff members (forensic service legal counsel, intake coordinator, psychiatric fellows and students) who had no prior experience with the AIS (ICC1 = 0.92)

### Concurrent Validity

Moderate support for HARM and HCR-20 v3<sup>1,2</sup>

Strong support for AIS and OAS<sup>1,3</sup>

### Conclusions

The eHARM supports groundbreaking use of analytics in psychiatry

Ability to utilize real time analytics for immediate patient care and risk management

Ability to examine the Patient Aggregator for both research and quality improvement in real time

## REFERENCES

- Chaimowitz and Mamak; Companion Guide to the Aggressive Incidents Scale (AIS) and the Hamilton Anatomy of Risk Management (HARM), 2<sup>nd</sup> Edition, 2015
- Douglas et al.; HCR-20V3: Assessing Risk of Violence – User Guide, 2013
- Yudofsky et al.; The Overt Aggression Scale for the Objective Rating of Verbal and Physical Aggression, American Journal of Psychiatry, 1986;

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