# Self-rating recovery in forensic settings: Associations between patients views of their own recovery, and measures of violence risk and symptoms



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## Introduction

Forensic mental health services perform a dual role in treating severe mental illness and managing violence and risk. Violence is an unmet treatment need in forensic settings, where a patient's recovery includes recovery from violent behaviour. Those individuals with a diagnosis of schizophrenia who go on to commit violent offences are more likely to have lower levels of insight into their illness.

Patients own views of their recovery and readiness to move to less secure places is an important marker of insight and engagement. In secure forensic mental health services, patients are offered engagement in a wide variety of therapeutic interventions, addressing mental health, violence, substance misuse and other issues. Readiness for moves to less secure places is a goal for patients and clinicians alike and should depend on genuine progress in these domains.

In this study, we found that symptoms are poor correlates of clinician-rated or selfrated forensic programme completion or recovery. Clinician rated MIRECC GAF relates very well to clinician rated measures of therapeutic programme completion and recovery. Clinician rated measures of function correlated very well with clinician rated measures of Dundrum-3 and Dundrum-4 (therapeutic programme completion and recovery) (as seen in Table 2). Clinician rated Dundrum-3 and Dundrum-4 correlated well with HCR-20 violence risk scales, as did most self-rated Dundrum scales except for the HCR-R item subscale (as seen in Table 2).

The Dundrum-3 Programme Completion Items and Dundrum-4 Recovery Items are used to assist in decision making in relation to obtaining leave from hospital and transitioning to lower levels of therapeutic security. They are grounded in theory concerning motivation, the cycle of change, engagement and addressing issues relevant to future avoidance of relapse and problem behaviours.

This study sought to ascertain the correlations between patients' views of their recovery and clinicians' views of patients' recovery, and clinician rated measures of symptoms and risk in a cohort of patients in the National Forensic Mental Health Service, Dundrum.

### Methods

A cross sectional study was performed of all current in-patients in the National Forensic Mental Health Service, Dundrum, Ireland. The self-rated Dundrum toolkit was offered to all 96 in-patients and completed by 64. Each patient was interviewed by psychiatry registrars who had received training in the use of the relevant measures and were blind to the ratings of other instruments made by colleagues.

Table 2 Measures of correlation between self-rated and staff-rated measures of patient recovery,	

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<u>Hisk and Symptoms</u>				
	Clinician rated		Self-rated	
	D-3	D-4	D-3	D-4
HCR-H	0.461**	0.449**	0.378**	0.335**
HCR-C	0.568**	0.685**	0.411**	0.365**
HCR-R	0.496**	0.569**	0.192	0.189
HCR-dynamic	0.626**	0.726**	0.359**	0.329*
HCR-total	0.603**	0.658**	0.403**	0.363**
GAF occupational	-0.496**	-0.480**	-0.250	-0.184
GAF functional	-0.389**	-0.453**	-0.350*	-0.250
GAF Symptomatic	-0.593**	-0.667**	-0.417**	-0.417**
PANSS pos	0.255	0.174	0.077	0.093
PANSS neg	0.313*	0.264	0.141	0.021
PANSS gen	0.275	0.254	0.053	0.078
PANSS total	0.322*	0.250	0.099	0.063

Dundrum 3 – programme completion scale; Dundrum-4 – recovery scale; HCR-20 – Historical, Clinical and Risk management tool; GAF – Global Assessment of Functioning; PANSS – Positive and Negative Syndrome Scale; \*\* p<0.001; \* p<0.05



Clinician-rated measures of violence risk (HCR-20), programme completion (Dundrum-3), recovery (Dundrum-4), symptoms (PANSS) and functioning (GAF) MIRECC) were rated. Data was collected as part of the D-FOREST (Dundrum Forensic Redevelopment Evaluation) Study.

ANOVA and concordance ratings were calculated using SPSS-27. Correlations calculated using the non-parametric Spearman's Rank correlation were coefficient.

Ethical approval was granted for the D-FOREST study by the National Forensic Mental Health Service Audit, Research and Ethics Committee, 14th Feb 2020, decision number: AUD/140220/MD. No financial sponsorship was obtained.

#### Results

The Self-rated Dundrum-3 programme completion and Dundrum-4 recovery scale was offered to all 96 patients in the hospital and completed by 64 patients (66.7%). Of those who completed, mean age was 41.3 years (SD 8.7, range 22.6-64.9 years). All 10 female patients in the hospital completed the self-rated measures. Male patients accounted for 84.4% of study participants. The most common diagnosis was schizophrenia (64.1%), followed by schizoaffective disorder (14.1%), Bipolar Affective disorder (6.3%) and Autism Spectrum disorder (4.7%).

As demonstrated in a previous study undertaken in the NFMHS, Dundrum; self-rated and clinician-rated measures of programme completion and recovery correlated well in this study. Patient recovery is closely linked with engagement and progressive programme completion. Included in the Dundrum-3 are participation in programmes concerning mental health, substance misuse and problem behaviours; whilst the Dundrum 4 assesses items such as stability, insight, therapeutic rapport and dynamic risk items.

Few studies have been performed assessing for associations between patient-rated measures of recovery and clinician-rated measures of symptoms and violence risk. In our study, this relationship was examined via the self-rated Dundrum 3 & 4 and clinician-rated PANSS, GAF and HCR-20 respectively. The self-rated D3 & D4 correlated best with the HCR-20 violence risk assessment as a measure. The GAF assesses a patient's overall level functioning and we found the better the scores on functioning using GAF were associated with better (lower) scores on programme completion and recovery using the Dundrum scale. This has strong face validity. The HCR-20 and clinician-rated Dundrum scales correlated very well, and again this is logical. Higher scores on violence risk are likely to be found in those who have worse progression in therapeutic domains such as mental health, substance misuse and offending behaviours.

The correlations between the clinician-rated scores on therapeutic programme completion and recovery and self-rated programme completion and recovery are seen in table 1.

Table 1. Correlations between clinician-rated and self-rated scores on programme completion (Dundrum-3) and recovery (Dundrum-4).

	Clinician-rated Dundrum-3	Clinician-rated Dundrum-4
Self-rated Dundrum-3	0.471**	0.419**
Self-rated Dundrum-4	0.365**	0.373**

\*\* p<0.001; \* p<0.05

This study demonstrated concordance between not only patient self-ratings of programme completion and recovery with clinician-rated equivalents, but also with clinician ratings of functioning and symptoms. It is noteworthy that whilst the agreement between these patient and clinician-rated measures are in the right direction, they do not have perfect agreement and thus hard outcomes including the granting of leave and moving to less secure settings cannot be made solely on the basis of patient-rated measures. Notwithstanding this, patient-rated measures serve as useful tools to improve a patient's understanding of and engagement in their recovery pathway.

#### References

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