Patients move forward on their care pathway to units with ever decreasing levels of security, which are designed to form a coherent pathway through secure care. It is important that forward moves are based on the individual patients’ needs and not on the amount of time that has elapsed since admission, as this is the case in a prison system. Secure forensic services aim to move patients forward to a less secure setting depending on their individual therapeutic progress. Progress in forensic settings include recovery from psychiatric symptoms. Other areas such as reduction in violence, need for therapeutic security and responses to interventions and treatments are of importance.

Discharge from a forensic hospital requires a careful balance between a reduction in the restrictions placed upon patients, with the serious risks that each individual may pose in a community setting. Backward moves on the secure care pathway typically occur in emergency situations, such as when an acute relapse of psychosis occurs, or when a patient engages in serious violence or substance misuse on their current ward. Moving a patient forward before they have achieved the sufficient level of recovery and engagement for that next step on the pathway, increases their risk of a subsequent backward move. Positive moves on the pathway must be carefully considered, with a thorough evaluation of readiness for positive moves, backward moves have negative implications for the individual patient and the service as a whole.

**Introduction:**

Secure forensic psychiatric hospitals provide specialised care and treatment for mentally ill offenders, along with managing the risks they pose, in particular, their risk of violence [1]. Primary objectives of forensic hospitals include the treatment of mental illness and reduction in violent recidivism. Secondary objectives include safe discharge from secure treatment facilities and reintegration of patients back into their communities as soon as is feasible. Treatment within forensic psychiatric hospitals, is facilitated by an environment of therapeutic security which involves a combination of environmental, relational and procedural security measures and can exist at varying levels within the same forensic hospital [2]. The aim of therapeutic security is to provide a safe space for therapists to address the unmet needs of patients with a history of violence and to safely challenge maladaptive coping mechanisms in order to help patients develop pro-social coping skills.

**Methods:**

This study was conducted at the Central Mental Hospital, Dundrum, Dublin, the site of the National Forensic Mental Health Service (NFMLS). Mental illness is defined as a mental disorder (MD) of the population of the Republic of Ireland, approx. 4.9 million. The NFMLS has therapeutically secure units at high, medium and low levels of security, which form one coherent care pathway through secure care. This study was completed as part of the Dundrum Forensic Reeducation Evaluation Study (D-FOREST), which is being carried out with a planned relocation of the hospital due to occur in 2022.

This was a prospective cohort study involving the full cohort of inpatients at the Central Mental Hospital, including those who were onsite and those who were off-site in staffed community residences. Patients were rated for PANSS (Positive and negative syndrome scale), Dundrum 3 (Programme completion) and Dundrum 4 (Recovery) scales and the HCR-20 (Historical Clinical and Risk Management tool, every 6 months over an 18 month period) that was conducted after attending training on PANSS assessment completion. HCR-20 and Dundrum 3 & 4 scores were completed by consultant lead multi-disciplinary teams and subsequently obtained from electronic records by registrars who recorded them. Moves to levels of higher security/lower security at each data point were identified and recorded.

Data was anonymised and analysed using SPSS. Repeated measures in the same individuals were studied using General Estimating Equations (GEE’s). A custom model was used in all cases, with normal distribution and identity as the link function. Case number was used to identify the subject variable, time period as within-subject variable. A main effects model was used for model building using the independent factor with subsequent addition of covariates, with intercept not included in the model. The scale parameter estimate was maximum likelihood estimation. Model effect analyses was type III and 95% confident intervals. Wald X2 statistics were calculated. Corrected Quasi Likelihood under Independence Model Criterion (QIC) was used to test goodness of fit, with information criteria in smaller is better form. Comparing models were compared on this basis. Margin means for the independent determinant were calculated.

Ethical approval was granted by the Central Mental Hospital Audit, Research and Ethics Committee.

**Discussion:**

We found that progress in secure hospital settings is forward moves on the secure care pathway, was linked to engagement in treatment programmes aimed at reducing violence and other factors e.g. overall levels of engagement, rapport and working alliance, insight and stability. We found that patients who had negative moves on their care pathways back to more secure units in the hospital struggled particularly in these areas (ie those areas measured by Dundrum-4).

A notable limitation of our study was that many patients, in particular those who were known to be severely unwell by clinical staff, did not participate in the PANSS collection which is an interview rated measure. This could likely have lead to data biases, as only the more recovered patients or better functioning patients were rated. To counter this, we also utilised the objective measures of the HCR-20 and Dundrum 3&4 which were available for all patients, ensuring information regarding the most unwell patients was also captured in our results.

**Conclusion:**

While important, symptomatic recovery is not the only important factor in recovery for forensic patients. Recovery across a wide variety of domains, including symptoms of psychosis, risk of violence but also therapeutic programmes and recovery in a broad sense, are important factors for patients in secure forensic hospitals. Interview rated measures may not always be appropriate or lead to accuracy in secure population cohorts where there are typically large numbers of very unwell patients. Developing and identifying reliable measures is a key area of research. Advances in electronic records within secure forensic facilities is vital for supporting active management of length of stay and aiding with proactive management of admission waiting lists.

**References:**


