



# An evaluation of functional mental capacity and overall functioning of in-patients in a National Forensic Mental Health Service.

Dr. Lauren Reilly, Dr. Mary Davoren, National Forensic Mental Health Service, Dublin.

## Background

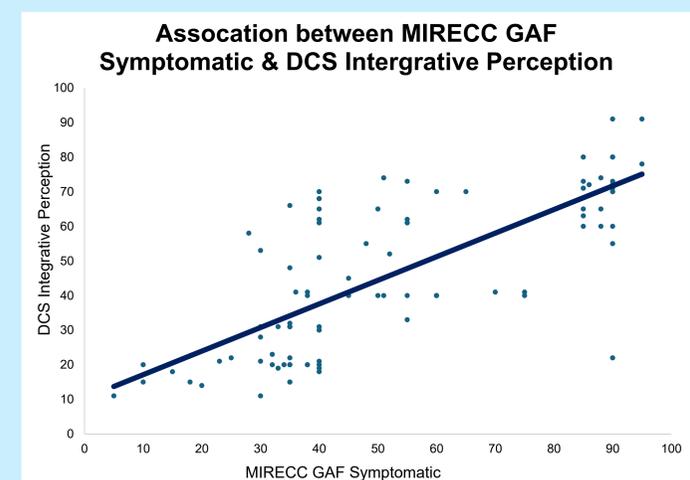
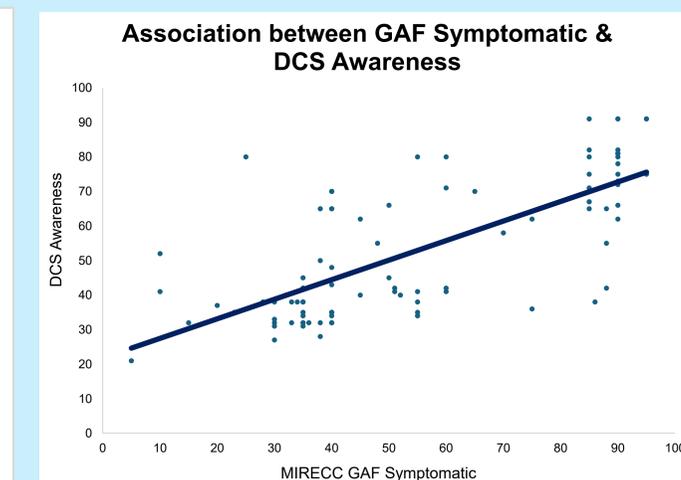
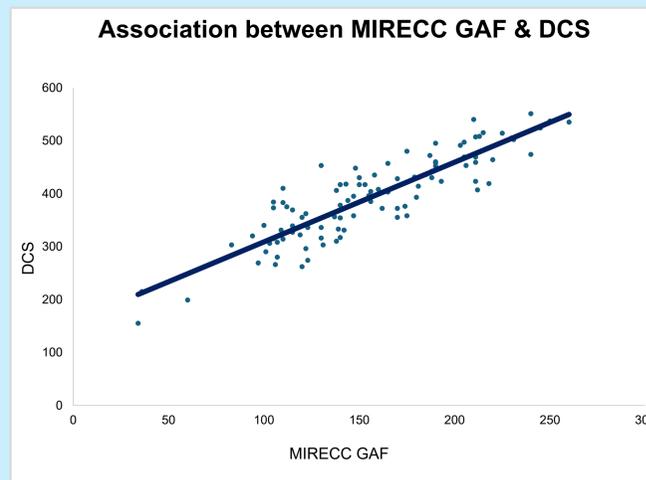
- Cognitive deficits are a key feature of schizophrenia and other enduring psychotic illnesses which may impact on the individual's functioning and decision making capacity.
- This may contribute to poor clinical outcomes and functional disability, leading to an impaired quality of life.
- The MIRECC GAF measures functioning in three domains, social, occupational and symptomatic.
- The DUNDRUM consciousness scale is a capacity tool, designed to assess domains of functional mental capacity.

## Aim and Hypothesis

- The objective of this study was to assess capacity and functioning of inpatients at the Central Mental Hospital (CMH), Dublin.
- We hypothesised that symptomatic, social and occupational functioning would be related to measures of functional mental capacity.

## Methods

- This is a cohort study as part of the DUNDRUM Forensic Redevelopment Evaluation Study (D-FOREST).
- An assessment of functioning with the MIRECC GAF assessment of social, occupation and symptomatic functioning and with the DUNDRUM capacity tool consciousness scale was completed for all male in-patients within the National Forensic Mental Health Service Dublin (n=100).
- Demographic data, data pertaining to legal capacity to consent to treatment and diagnostic data were gathered.
- Data was analysed using ROC analysis and correlation coefficients.



## Results

- The sample included those on high, medium and low secure units (all male, n=100) at the CMH, Dublin.
- The most common diagnosis was schizophrenia.
- The consciousness scale of the DUNDRUM capacity tool had good internal consistency (Cronbachs alpha = 0.777).
- ROC analysis demonstrated that scores on the DUNDRUM capacity consciousness scale were associated with independent consultant second opinion doctors assessments of capacity to consent to treatment (ROC area under the curve 0.885, p<0.001) as were the ratings on MIRECC GAF total score (ROC area under the curve 0.881, p<0.001).
- We found that total score on MIRECC GAF correlated well with the DUNDRUM capacity consciousness scale (Spearman's rho= 0.858, p<0.001) and that on an item to outcome analysis of correlation, the highest correlations were between the GAF symptomatic domain and the DUNDRUM consciousness items awareness (Spearman's rho = 0.724, p<0.001) and iterative perception (Spearman's rho = 0.751, p<0.001).

## Discussion

- This study demonstrates a strong relationship between functional mental capacity and overall functional abilities in a forensic inpatient population.
- The particularly strong association between symptomatic functioning and capacity-related constructs reinforces the importance of active psychopathology as a determinant of impaired capacity, rather than diagnosis alone.
- Clinically, these findings suggest that individuals with higher levels of active symptoms are more likely to experience impairments across multiple functional domains, which may compromise their ability to engage in informed decision-making.
- Capacity, as measured by the DUNDRUM capacity consciousness scale, showed concordance with independent consultant assessments of capacity to consent to treatment, supporting its clinical validity in secure settings.
- Incorporating structured measures of functioning alongside capacity assessments may therefore enhance clinical decision-making, treatment planning and legal determinations in secure mental health services.

## Conclusion

- Functional mental capacity and overall functioning are linked, and active symptoms of major mental illness are highly relevant when assessing functional mental capacity overall.
- Clinically, those individuals living with the highest levels of active symptoms are likely to have impaired functioning across multiple domains including awareness and integrative perception.
- This assessment of functional mental capacity may be a clinically relevant alternative to Grisso and Applebaum in secure populations.