

The Patient is Always Right?

Disparities between Clinician and Patient rated
HoNOSCA ratings across five adolescent inpatient units

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Background to HoNOSCA

- HONOSCA clinician rated measure (Gowers et al 1999)
- Objectives of HoNOSCA were:
 - To be acceptable to clinicians in all disciplines and settings
 - To be valid and reliable and sensitive to change
 - To cover all major child mental health difficulties
- User rated measure (Gowers et al 2002)
- In UK, CAMHS services encouraged to use HoNOSCA but variable compliance across services
- Often outcome measurement not seen as integral part of clinical service provision and benefits not appreciated

Purpose of Outcome Measurement

- Measuring clinical improvement
- Assessing levels of functioning
 - Health
 - Education
 - Social functioning
 - Family life
- Describing met and un-met needs
- Rating compliance and satisfaction with services
- By proxy, assessing quality of service delivery

- Opportunity for clinicians, patients & carers to give a view
- But how should differences between scores be approached?

- Could they enhance the relationship between clinicians and patients?

Clinical Use of Outcome Measures

Are we the right service?	Identifying people who could/should be discharged/ "Permission to discharge"
Concordance	Encourage fuller, multi-perspective understanding of the person
Change	Identifying positive and negative changes over time
Concerns	Identifying issues to be addressed and plans to address them
Priorities	Specifying highest priority changes to promote recovery

Malcolm Stewart, Auckland, New Zealand (2007)

The Priory Journey...

- During 2010 Priory commenced the implementation of Carenotes as an Electronic Care Record System (ECR) across all Priory healthcare services
- Over the year, collection rates of HoNOSCA (clinician rated) at admission and discharge increased from ~25% to ~90%+
- Most CAMHS sites also began using the patient rated version of HoNOSCA as a matter of routine

The Priory Journey...

- Increased collection rates of HoNOSCA are attributed to;
 - IT systems that embed outcome measurement into the wider care record, rather than making outcomes a separate task
 - Management buy-in to the concept of Outcomes as an important part of services
 - Regular reports feeding back to teams and management on the completeness of data and the ongoing delivery of results and analysis to teams

Results – Data Collection

Data Completeness of Episodes With Admission HoNOSCA

Programme	Number of Units With Service	Total Episodes	% With Patient Admission HoNOSCA	Total Discharges	% With Clinician Discharge HoNOSCA	% With Patient Discharge HoNOSCA	% With Paired Clinician & Patient Data
CAMHS	4	178	90.45%	154	88.96%	79.87%	76.62%
HDU CAMHS	2	62	88.71%	55	94.55%	72.73%	67.27%
EDU	5	57	89.47%	28	100%	82.14%	82.14%
Total	5	297	89.90%	237	91.56%	78.48%	75.11%

- 90% of episodes had a completed patient-rated HoNOSCA
- 90% of episodes had paired clinician data (i.e. Admission & Discharge)
- There was more difficulty collecting patient-rated HoNOSCA data at discharge with 78% of episodes having complete data
- 75% of episodes had complete data at admission & discharge from both patients and clinicians

Results – Total Scores

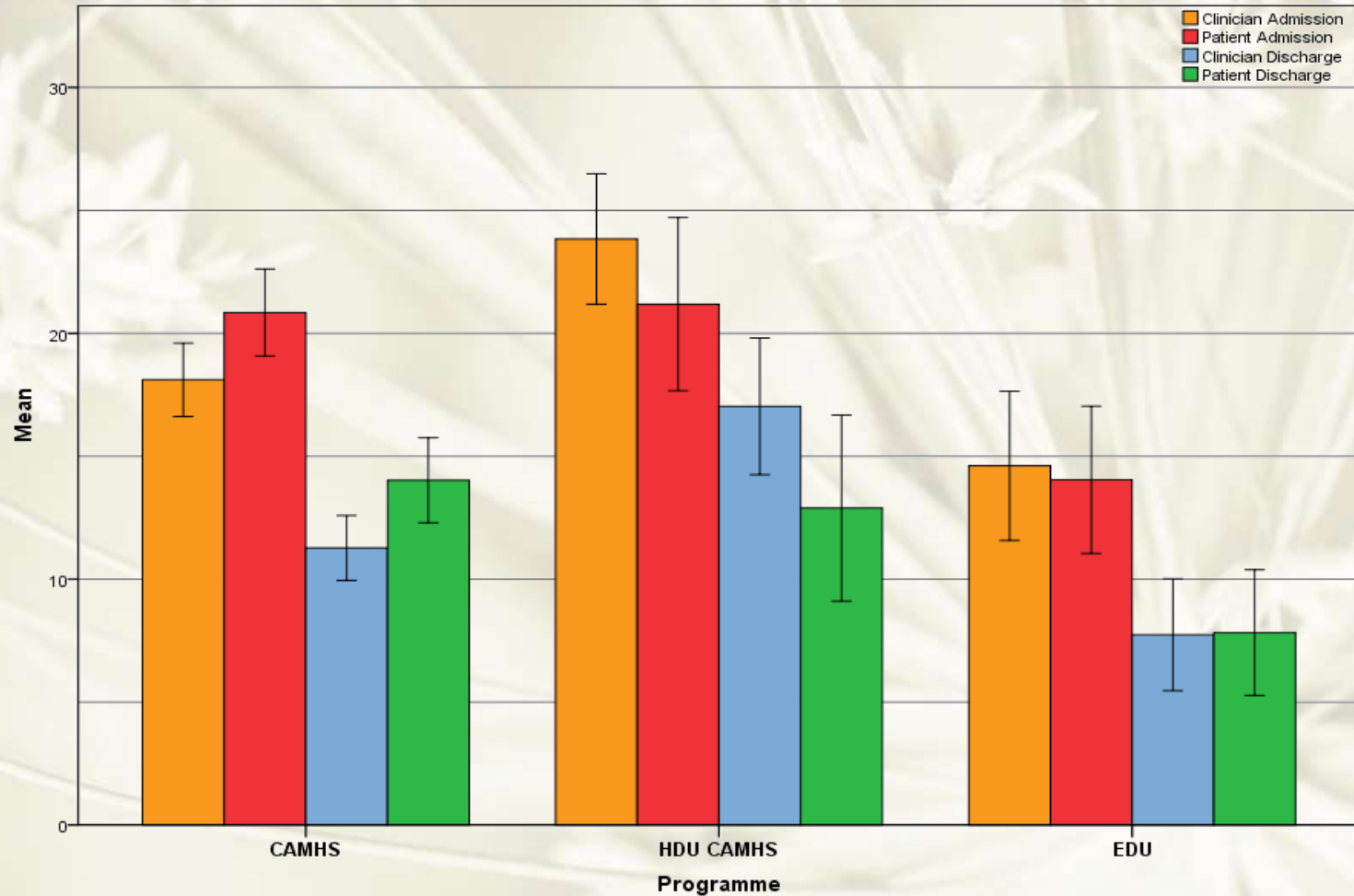
Mean HoNOSCA Scale A Totals

Programme	Clinician Admission HoNOSCA	Patient Admission HoNOSCA	Clinician Discharge HoNOSCA	Patient Discharge HoNOSCA
CAMHS	18.97	21.48	11.66	13.85
HDU CAMHS	22.66	21.29	17.35	12.83
EDU	16.28	17.53	8.14	7.83
Total	19.23	20.69	12.57	12.89

- Patient-rated scores were slightly higher on average than clinician scores at both admission and discharge
- This difference was most significant in regular CAMHS programmes

Results – Total Scores

Clinician & Patient HoNOSCA Scale A Totals at Admission & Discharge



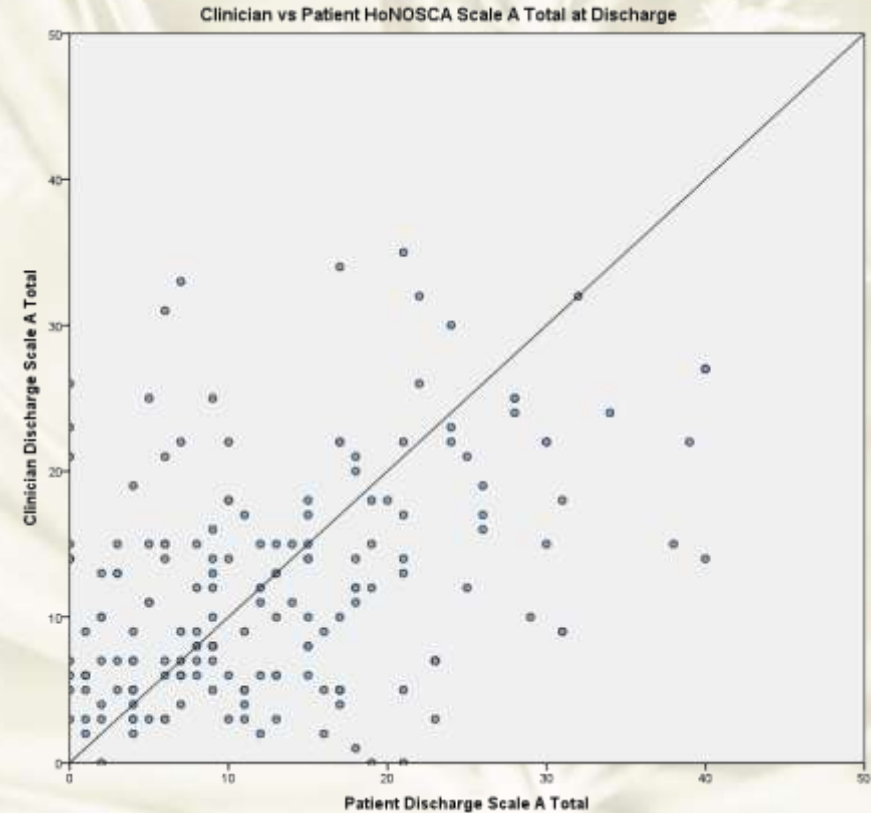
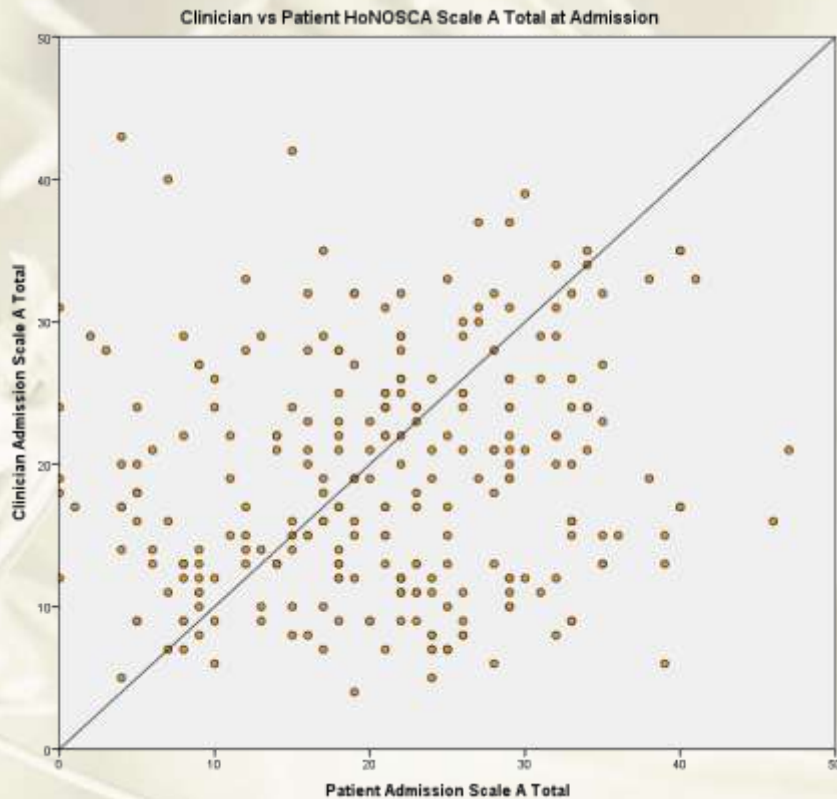
Error Bars: 95% CI

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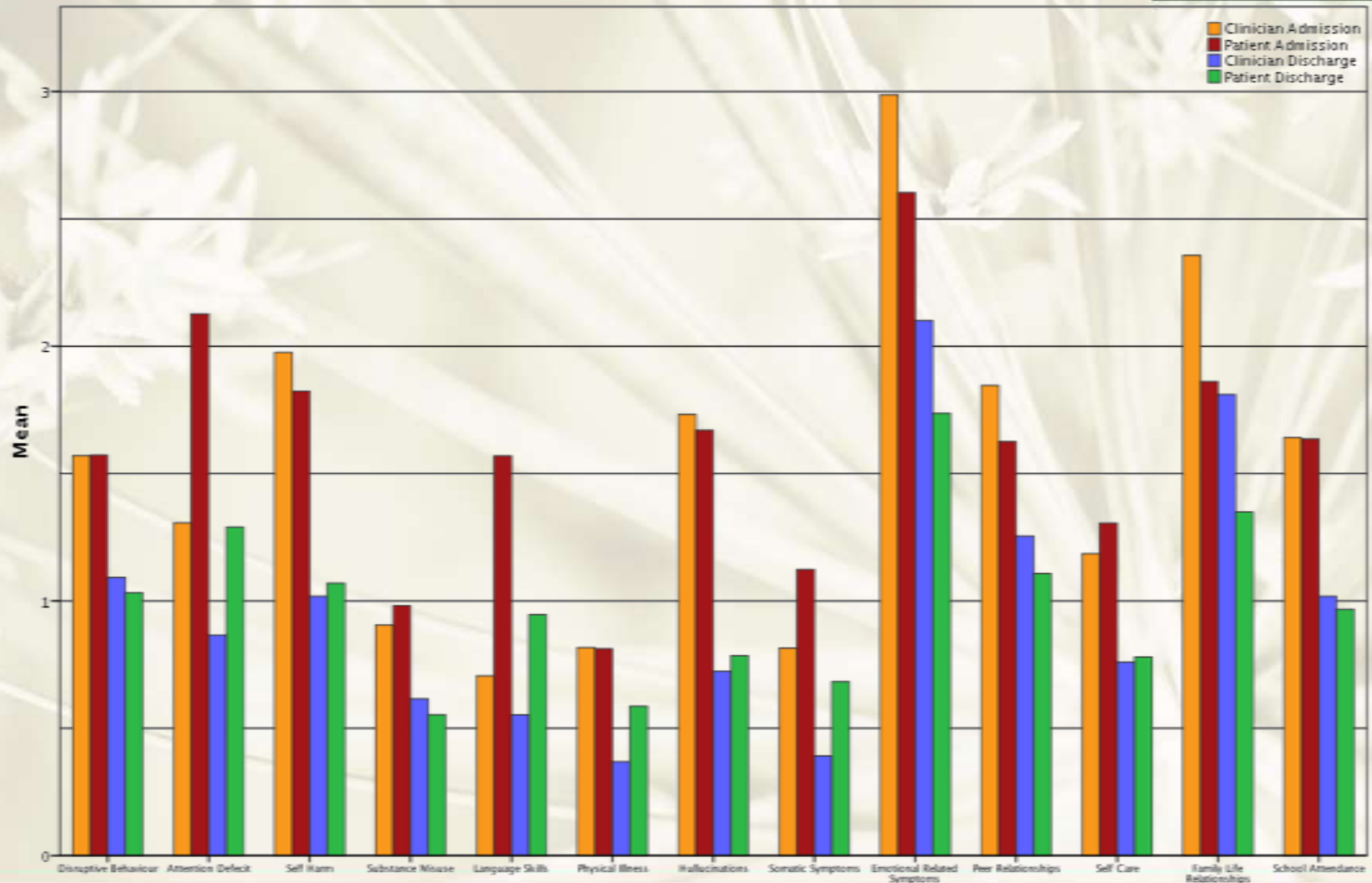
Results – Total Scores



- Correlation between clinician and patient scores was weak at admission ($r=.156$, $p=.011$) and moderate at discharge ($r=.404$, $p<.001$)

Results – Individual Item Scores

HoNOSCA Clinician & Patient Mean Item Scores at Admission & Discharge



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Results – Gender Differences

Correlations - Patient & Clinician Total Scores at Admission & Discharge

		Clinician Admission		Clinician Discharge	
		Gender		Gender	
		Female	Male	Female	Male
Patient Admission	Pearson Correlation	.123	.259*		
	Sig. (2-tailed)	.086	.028		
	N	195	72		
Patient Discharge	Pearson Correlation			.475**	.136
	Sig. (2-tailed)			.000	.330
	N			131	53

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

- Patient and clinician total scores showed a mild but significant correlation for males on admission
- This theme was reversed on discharge where female patients' scores correlated with clinician ratings more than males

Results – Gender Differences

Paired Samples T-Test HoNOSCA Items: Clinician - Patient at Admission

		Gender					
		Female (N= 195)			Male (N= 72)		
		t	df	Sig. (2-tailed)	t	df	Sig. (2-tailed)
Pair 1	Disruptive Behaviour	-.706	187	.481	-.217	67	.829
Pair 2	Attention Deficit	-7.352	188	.000	-2.648	67	.010
Pair 3	Non Accidental Self Injury	.967	190	.335	1.422	70	.159
Pair 4	Substance Misuse	-1.362	188	.175	-1.350	67	.182
Pair 5	Language Skills	-8.243	190	.000	-3.151	68	.002
Pair 6	Physical Illness	-.608	189	.544	1.384	69	.171
Pair 7	Hallucinations	-.177	182	.860	-.604	67	.548
Pair 8	Somatic Symptoms	-3.161	186	.002	-.407	68	.685
Pair 9	Emotional Related Symptoms	3.917	194	.000	1.342	71	.184
Pair 10	Peer Relationship	1.222	191	.223	1.743	69	.086
Pair 11	Self Care	-1.485	185	.139	-.223	70	.824
Pair 12	Family Life Relationship	4.147	187	.000	2.027	68	.047
Pair 13	School Attendance	-.249	181	.804	-.312	67	.756

- There were significant differences between clinician and female patient rated scores in the following items;
 - Attention
 - Scholastic/ Language
 - Somatic Symptoms
 - Emotional Problems
 - Family Life Problems
- There were also some significant differences between the two assessments at admission for male patients, but effect sizes were smaller as shown by the greater correlation in total score

Results – Gender Differences

Correlations - Emotional-Related Problems Item

		Gender			
		Female		Male	
		Clinician on Admission	Clinician on Discharge	Clinician on Admission	Clinician on Discharge
Patient on Admission	Pearson Correlation	.122		.248*	
	Sig. (2-tailed)	.089		.036	
	N	195		72	
Patient on Discharge	Pearson Correlation		.319**		.019
	Sig. (2-tailed)		.000		.892
	N		131		53

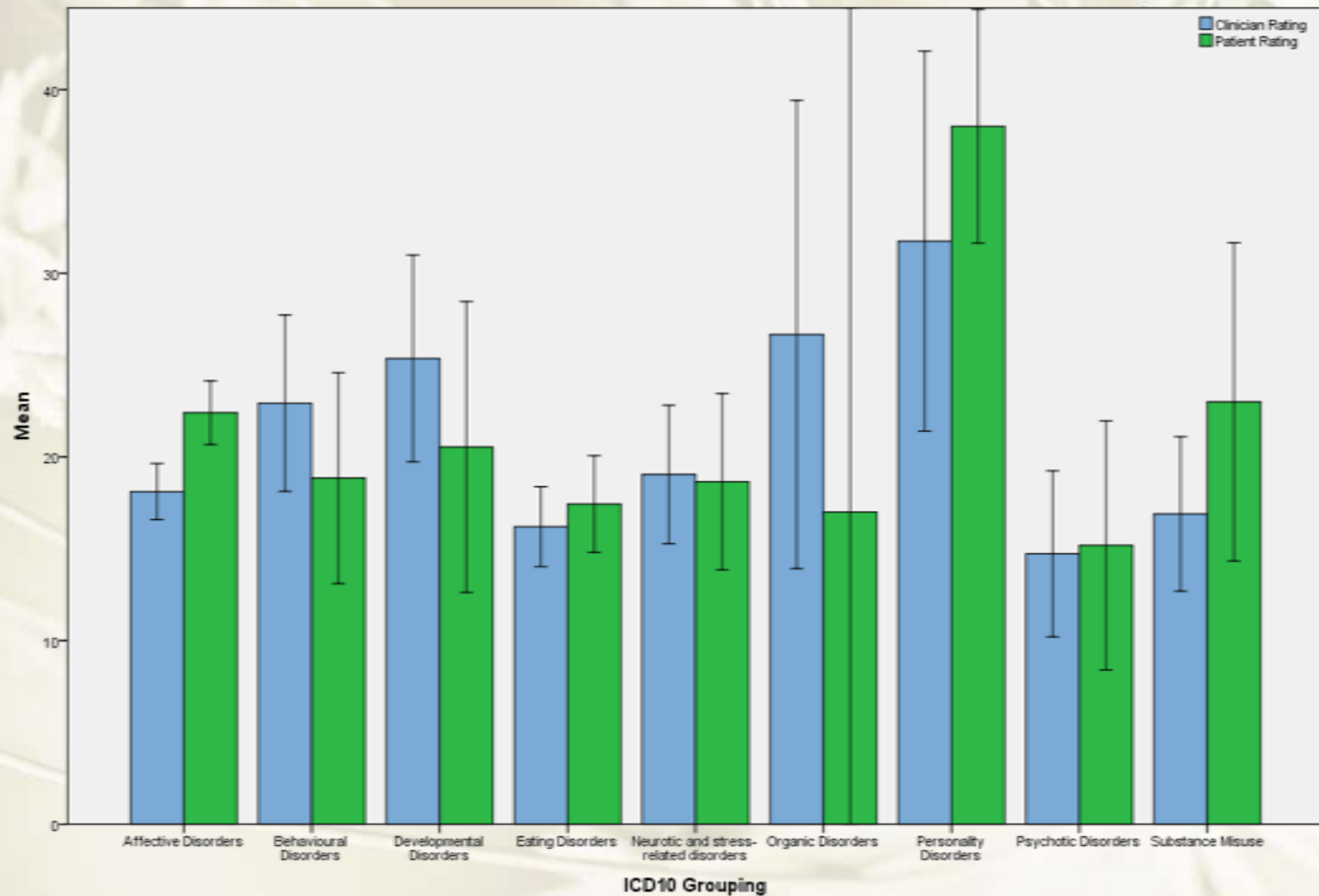
** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

- The emotional related problems scores revealed closer correlation between clinicians and young people for males than females at admission
- This was however reversed on discharge where female patients' scores agreed more closely with clinicians' scores

Results – By ICD10 Grouping

Total HoNOSCA Score at Admission - Clinician & Patient Rated by ICD10 Grouping

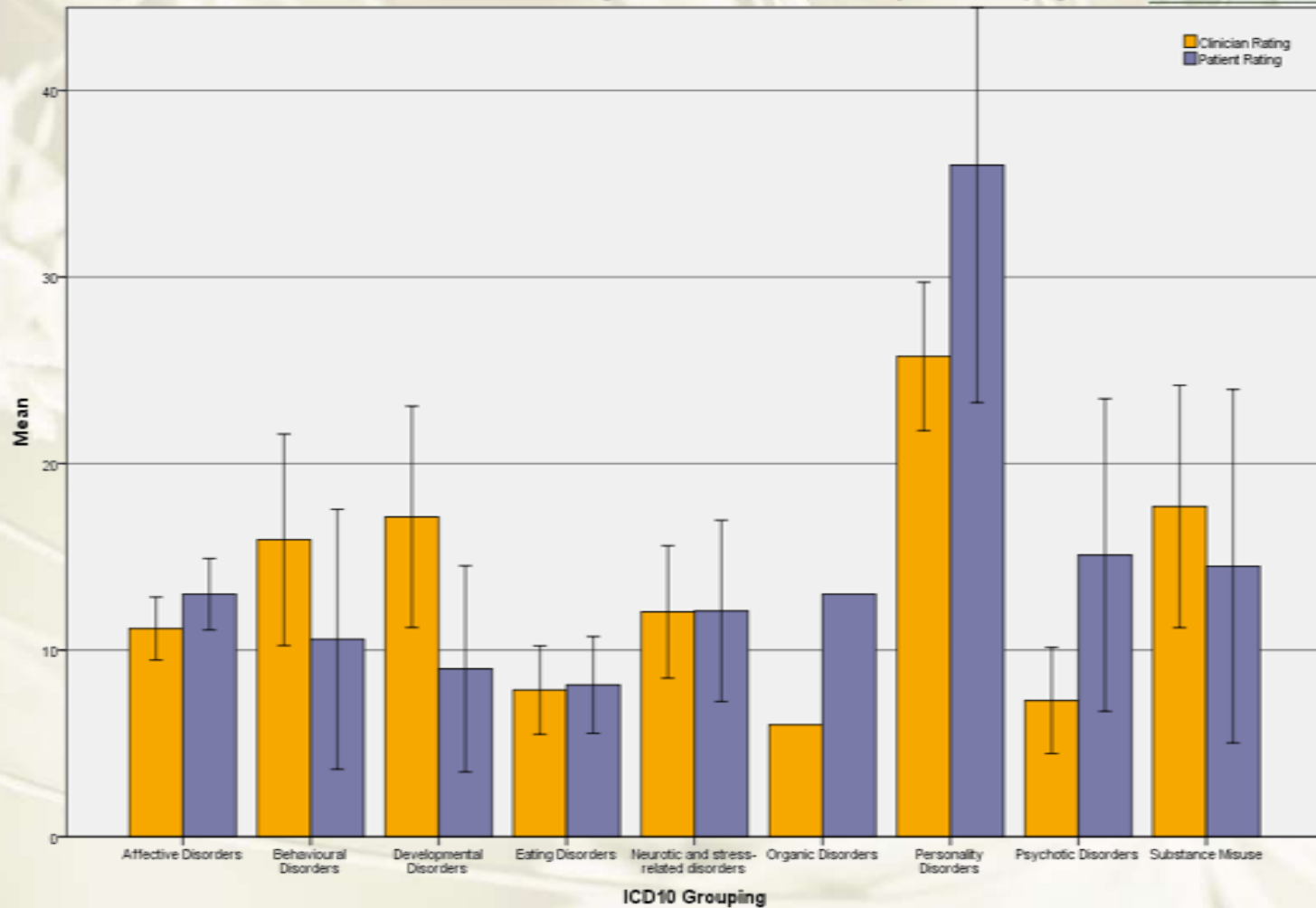


Error Bars: 95% CI

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Results – By ICD10 Grouping

Total HoNOSCA Score at Discharge - Clinician & Patient Rated by ICD10 Grouping



Error Bars: 95% CI

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Results – By ICD10 Grouping

		Affective Disorders	Behavioural Disorders	Developmental Disorders	Eating Disorders	Neurotic/ stress disorders	Organic Disorders	Personality Disorders	Psychotic Disorders	Substance Misuse	Missing	Total
Difference At Admission	N=	106	13	11	50	23	3	4	11	10	36	267
	Mean	4.29	-4.08	-4.82	1.24	-.39	-9.67	6.25	.45	6.10	.17	1.76
Difference At Discharge	N=	84	13	8	26	22	1	4	13	10	36	217
	Mean	-.92	-5.85	-9.13	-.77	-1.23	7.00	10.25	1.00	-3.20	-2.75	-1.58

*Positive values show higher patient scores compared with clinician scores

- Affective disorders was the largest group in the sample and also the group with the most statistically significant differences at admission
- Many of the groups are too small to draw strong inferences from, analysis should be repeated once more data is available

Results – Predicting Length of Stay

Correlation Between Length of Stay and Total Score on Admission			
Measure	Programme		
	CAMHS	HDU CAMHS	EDU
Clinician HoNOSCA Total	.115 (n=154)	.063 (n=55)	.381* (n=28)
Patient HonOSCA Total	.220** (n=123)	-.164 (n=40)	.022 (n=23)

- In CAMHS programmes there was a mild but significant correlation between LoS and the Patient's total HoNOSCA score
- In Eating Disorders the clinician total score correlated better with the eventual length of the episode

Results – Predicting Incomplete Episodes

Correlation Between Clinician and Patient Rated Total Score on Admission		
	Gender	
Discharge Type	Male	Female
Treatment Complete	.353** (n=62)	.085 (n=133)
Treatment Incomplete (eg via Self Discharge)	-.247 (n=12)	.575** (n=30)

- Female patients whose episodes ended via unplanned discharges were more likely to have clinician and patient rated scores that agreed with each other
- Conversely male patients were more likely to have unplanned discharges where clinician and patient scores disagreed

Results – Predicting SDN Usage

Area Under the Curve When Testing for Any SDN Use vs Total Scores at Admission			
Measure	Programme		
	CAMHS	HDU CAMHS	EDU
Clinician HoNOSCA Total	.508 (n=154)	.732 (n=55)	.774 (n=28)
Patient HonOSCA Total	.480 (n=123)	.652 (n=40)	.495 (n=23)

- In all instances the Clinician rated score was more likely to predict the use of Special Duty Nursing (1:1 or above)
- In HDU CAMHS and EDU services the relationship between HoNOSCA scores and SDN usage was much stronger

Conclusions

- It is possible to achieve high completion rates for both clinician and patient rated outcome measures in inpatient units
- Outcome scores may differ between clinicians and patients by:
 - Gender
 - ICD-10 diagnosis (especially for Affective Disorders)
- In Generic CAMHS units, patient rated admission outcomes better predicted ultimate Length of Stay
- Unplanned discharges were characterised by greater agreement at admission for females and disagreement for males
- Where resources are required to improve outcome measurement programmes, this investment should be justified by potential CQUIN revenues
- Outcome measures can be used by clinicians as clinical tools

Case Study 1

Patient A

- 16 year old girl admitted with low mood after overdose of 24 paracetamol
- Has been making slow progress on the unit over past 6 weeks
- Limited engagement in therapeutic programme
- Several incidents of self-cutting and verbal aggression / defiance toward staff

	Disruptive Behaviour	Attention Deficit	Non Accidental Self Injury	Substance Misuse	Language Skills	Physical Illness	Hallucinations	Somatic Symptoms	Emotional Related Symptoms	Peer Relationship	Self Care	Family Life Relationship	School Attendance	Scale A Total
Clinician Rating	3	2	2	0	3	0	0	1	3	2	2	4	3	25
Patient Rating	0	4	3	0	1	0	3	0	4	0	0	0	1	16

Case Study 2

Patient B

- 15 year old boy with first episode psychosis
- Has been on the unit for 8 weeks and has responded well to medication treatment
- Limited engagement in psychological therapy and poor concentration re schoolwork
- No major management problems or risks evident but self-care has been quite poor

	Disruptive Behaviour	Attention Deficit	Non Accidental Self Injury	Substance Misuse	Language Skills	Physical Illness	Hallucinations	Somatic Symptoms	Emotional Related Symptoms	Peer Relationship	Self Care	Family Life Relationship	School Attendance	Scale A Total
Clinician Rating	0	4	0	0	4	0	2	1	1	3	3	0	2	20
Patient Rating	0	4	2	0	3	0	4	0	4	1	0	2	2	22

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