

Are HoNOS Scores related to length of stay in an acute psychiatric inpatient unit?

Tom Trauer

St Vincent's Hospital, Melbourne



University of Melbourne



1

Background

Several studies have examined whether there is a relationship between HoNOS scores at admission to an acute psychiatric inpatient unit

The general impression appears to be that the relationship is either very weak or non-existent

2

Harnett et al. 2005

- Used HoNOSCA in a Child & Adolescent unit
- Average length of stay was 24 weeks
- Intake HoNOSCA obtained 3 weeks into admission (on average)
- No association between HoNOSCA item scores or total scores with length of stay

3

Boot et al., 1997

- Studied 18 units in public general, public psychiatric, and private psychiatric hospitals
- Average length of stay 14 to 20 days
- 5 HoNOS items related to length of stay
- Longer: accommodation, mood, ADLs
- Shorter: self-harm, aggression
- After adjusting for factors such as hospital type, "the HoNOS data moderately increased the predictability of length of stay"

4

Page et al., 2001

- Admissions to a private hospital over 2 years
- Average length of stay 9 days
- No actual figures presented, but Discussion says: "both the SF-36 and the HoNOS subscales were able to predict length of stay and symptom change"

5

Smith et al., 2001

- Two private psychiatric hospitals over 4 years
- Average length of stay 18 days
- Focussed on HoNOS item 2 (Deliberate self-harm)
- Those who had attempted suicide or who had suicidal ideation had a shorter length of stay than those without suicidal ideation or behaviour" (18 days versus 16.7 days)

6

Goldney et al., 1998

- Six private psychiatric hospitals over 3 months
- Average length of stay 20 days
- No association between HoNOS total score and length of stay overall ($r = 0.02$), nor at any of the hospitals
- However, some HoNOS items were associated
- Longer: Depressed mood, ADLs
- Shorter: Aggression, Substance misuse, Hallucinations & delusions

7

Summary of literature

- Many of the papers relate to private psychiatric hospitals, where
 - Length of stay generally longer than in public, and
 - Diagnostic composition different
- Inconsistent findings

8

This study

- St Vincent's Hospital, Melbourne acute unit. 2 wards, 44 beds
- Examined a 17 month period. (Jan 07 to May 08)
- 910 episodes, 631 consumers
- HoNOS completed 67% admission, 31% discharge
- Length of stay 0 to 245, mean 20, median 13 days
- Principal diagnoses: 59% schizophrenia, 33% substance misuse, 32% mood disorder

9

Significant correlation with LOS

	Admission	Discharge
Aggressive, etc	+	
Self-harm	-	-
Substance misuse	-	-
Cognitive problems	+	+
Physical problems	+	
Hallucinations/delusions	+	+
Depressed mood	-	-
Other psychological problems		-
Relationship problems		
ADLs	+	+
Accommodation		
Occupation/leisure		
Total score		

10

Summary of correlations

- Aggressive etc. behaviour, cognitive problems, physical problems, hallucinations/delusions, and poor ADLs at admission are correlated with longer length of stay
- Self-harm, Substance misuse, and depressed mood are correlated with shorter length of stay
- Because of these opposing effect, the total score is uncorrelated

11

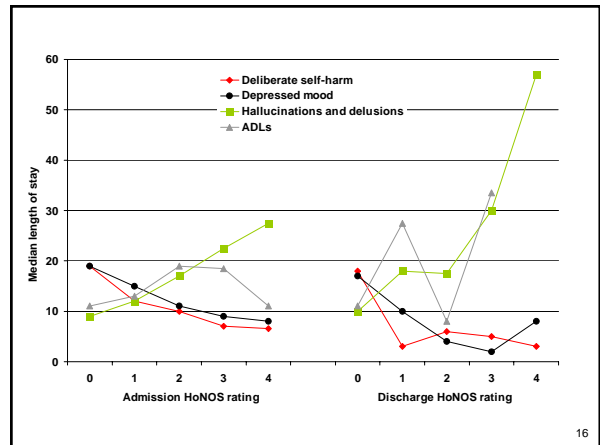
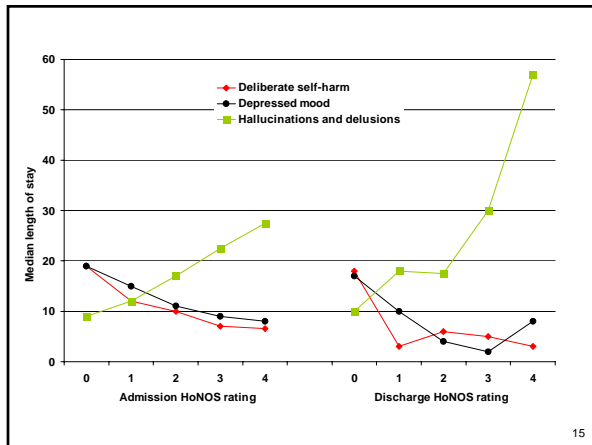
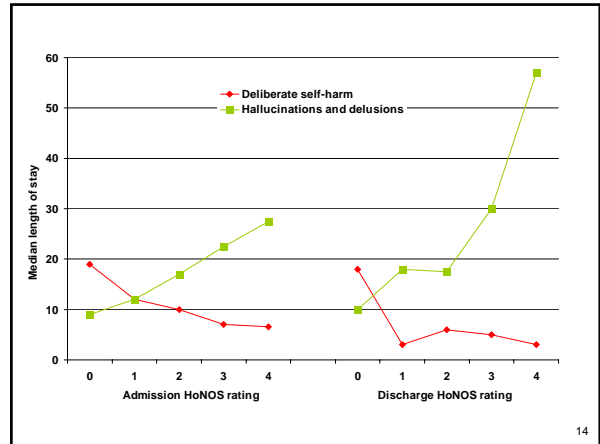
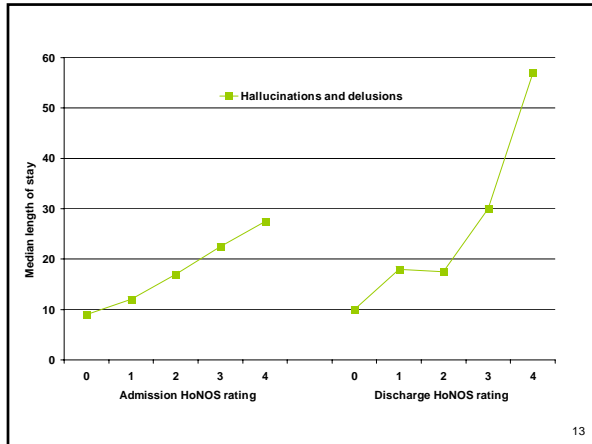
Nature of the association

Not all items that were correlated with longer or shorter length of stays had smooth or continuous associations

Therefore each was inspected to determine the nature of its association

For example, scores of 0, 1, 2, 3 and 4 on item Hallucinations/delusions were associated with median lengths of stay of 9, 12, 17, 22.5 and 27.5 days

12



Summary

Higher severity scores on items related to psychotic symptoms and disability are associated with *longer* lengths of stay

while

Higher severity scores on items related to depression are associated with *shorter* lengths of stay

Implications

Don't use HoNOS total score when exploring length of stay

Be aware that overall severity doesn't relate to length of stay

Higher severity on certain items is actually associated with shorter lengths of stay

This effect may be context-specific; ie the public mental health system has more consumers with psychosis and fewer with mood disorders