## Original Paper

# Study of Presentations for Involuntary Admission to a Cork Approved Centre

Elaine Dunne, Eamonn Moloney

Ir J Psych Med 2012; 29 (1): 16-21

## **Abstract**

**Objectives:** To describe the characteristics of patients who present to an approved centre with Mental Health Act 2001 forms, and secondly, to compare those who were subsequently detained to those who were not detained.

**Methods:** Specific data on patients who presented to South Lee Mental Health Unit with application and recommendation forms for Involuntary Admission over a 22 month period was gathered from a retrospective case note review. Information on both groups was compared statistically using Graph Pad Prism software.

Results: 71% (n=121) of patients presenting for involuntary admission did so outside of normal working hours. Those who were not subsequently detained were more likely to have had their application made by the Gardai and their recommendation made by someone other than their own General Practitioner (GP). GPs were more likely than Consultant Psychiatrists to cite risk to self or others as the reason for involuntary admission.

Conclusion: Although involuntary admissions most often occur in emergency situations, every effort should be made to ensure that those who are known to the patient are involved in the process of application and recommendation. In addition, there is a need for ongoing training and education of those most commonly involved, such as the Gardai and General Practitioners, as well as feedback to these groups when a patient presents who does not require involuntary admission.

**Key words:** Mental Health Act 2001; Involuntary admission; Detention

#### Introduction

Part 2 of the Irish Mental Health Act (MHA) 2001 was implemented on November 1st 2006 and introduced new procedures for the involuntary admission of patients to approved centres. The Mental Health Commission has produced a report on the operation of the MHA¹ and there have been numerous legal challenges to the legislation in the form of Article 40 challenges, judicial reviews and High Court and Supreme Court challenges.

South Lee Mental Health Unit caters for a catchment area population of 179,000. The approved centre is located in Cork University Hospital and has 46 inpatient beds with approximately 500 admissions per year and had an involuntary admission rate of 54.7/100,000 in 2007.

The objective of this study was to describe all those patients who presented to the South Lee Mental Health Unit at Cork University Hospital with an application and medical recommendation for admission under the MHA over a 22 month period in order to establish if these patients were similar to those described in national data. A comparison was also made of those patients for whom an admission order was completed and those who did not have an admission order completed. Such patients are, by definition, deprived of their liberty for up to twenty four hours and it is important that their management is reviewed.

#### Methods

Records were kept of all patients who presented to the South Lee Mental Health Unit with completed application and medical recommendation forms for admission under the Mental Health Act 2001 between January 2007 and October 2008. Cases of those who were subsequently detained and those who were not detained were identified from these records and included in the study. The period originally planned to be studied was a two year period from the implementation of the MHA 2001 (i.e. from November 2006 to October 2008). It was decided; however, to omit cases from the initial two month period as the high number of incorrectly completed forms due to an adjustment period during this time was likely to affect the overall results, making them less representative.

A retrospective case note review was carried out to examine the demographic characteristics, the reasons for referral, the past psychiatric history, diagnosis and presenting symptoms of these patients. Where full medical notes were not available, all data was retrieved from copies of initial assessments, electronically recorded patient details and copies of MHA 2001 forms.

Eamon Moloney, Consultant Psychiatrist/Clinical Director, South Lee Mental Health Services, Cork University Hospital, Wilton, Co. Cork, Ireland. Submitted January 13th 2011 Accepted August 15th 2011

<sup>\*</sup> Elaine Dunne,
South Lee Mental Health Services,
Cork University Hospital, Wilton, Co. Cork, Ireland.
F-mail elaine dunne@ucc ie

The application, medical recommendation and admission order forms were reviewed and specific details recorded. Data in relation to patients where an admission order was completed was compared to data in relation to those patients where an admission order was not completed and comparisons were also made with national data on patients admitted under the MHA 2001. Voluntary patients who were regraded and detained under the MHA during their admission were not included.

All statistical calculations were performed using Graph Pad Prism version 4.0 for windows (Graph Pad Software, San Diego, CA, USA) and student t test (Mann Whitney U test for nonparametric data) or Chi square test/Fisher's exact test were used as appropriate to identify significant differences between groups.

#### Results

During the 22 month study period, 171 patients presented to the unit with an application and recommendation for involuntary admission completed. 81% (n=139) of these patients were detained under the MHA following the completion of an admission order. Comparison of details of those who were detained to available national statistics and secondly, to those who were not detained, is presented in Table 1 and Table 2, respectively.

Almost three quarters of those patients who presented for assessment for involuntary detention did so outside of regular working hours with 29% (n=50) presenting between 9am and 5pm, Monday to Friday.

In 29% (n=50) of presentations, the patient was brought to the approved centre by the gardai without an assisted admission team or relatives. This occurred significantly more often in those patients where an admission order was not subsequently completed than in those patients who were subsequently detained under the MHA, 50% (n=16) and 24% (n=34) respectively ( $x^2 = 8.20$ ; p=0.0042)

For the group of patients where an admission order was not completed, there was a significantly higher number of applications made by a garda compared to the group where an admission order was completed (31% (n=10) v 12% (n=16);  $x^2 = 7.86$ ; p=0.0051).

Of all patients presenting with MHA forms during this time, 56% (n=95) had their medical recommendation made by their own General Practitioner. This includes 60% (n=84) of those who were detained and only 34% (n=11) of those who were not detained. The difference was statistically significant ( $x^2 = 7.15$ ; p=0.0075).

There was a significant difference between General Practitioners and Consultant Psychiatrists in relation to the criteria used for recommendation or admission (Table 3). In relation to those patients who were detained under MHA, 40% (n=56) of general practitioners considered the patient to be a risk to self or others but only 20% (n=28) of consultant psychiatrists thought so ( $x^2$  = 12.52; p=0.0004). Consultant Psychiatrists used criterion (b) alone (risk of serious deterioration etc.) in 68% (n=95) of completed admission orders, which was a significantly higher rate than the 50% (n=70) of cases for GPs ( $x^2$  = 8.57; p=0.0034). There was no difference in the number of times in which consultant psychiatrists

and GPs felt that both criteria were satisfied (12% (n=17) and 7% (n=10) respectively). Neither box was ticked by the GP in 3% (n=4) of cases. The Consultant and GP opinion as to the reason for admission differed in 37% (n=41) of individual cases.

In relation to primary diagnosis, there was a significantly higher frequency of substance misuse related illness (38% (n=12) v 4% (n=5); Fisher's exact test p<0.0001) and personality disorder (9% (n=3) v 0% (n=0); Fisher's exact test p=0.0061), and a lower frequency of schizophreniform illness (19% (n=6) v 53% (n=74);  $x^2$  = 12.43; p=0.0004) in those who were not detained compared to those patients where an admission order was completed. There was no significant difference between the groups in relation to all other primary diagnoses.

Similar proportions of those with a primary diagnosis of substance abuse were actually reported to have a dual diagnosis (20% (n=1) of those detained v 25% (n=3) of those not detained). 60% (n=3) of those admitted as involuntary patients despite a primary diagnosis of substance abuse had a secondary psychotic illness and 20% (n=1) had a secondary depressive illness. One person (0.8%) from the group of patients with a primary diagnosis of substance abuse who were not detained had a secondary psychiatric illness (alcohol dementia). Of note, the Mental Health Act 2001 does not permit detention as an involuntary patient based on a diagnosis of substance dependence or personality disorder.

In addition, those who were detained were less likely to be using substances at the time of presentation than those who were not detained (25% (n=35) v 44% (n=14);  $x^2 = 4.39$ ; p=0.0362).

The final part of the study examined the outcomes of the group of patients who were not detained (Table 4). 6% (n=2) of those who presented with MHA forms but who were not initially detained were admitted or regraded as involuntary patients within a week of presentation.

## Discussion

This study sought to explore how Part 2 of the MHA 2001 was operating in a busy, acute psychiatric service. The importance of striking a balance between ensuring that those patients who have an acute psychiatric illness and are at risk, receive appropriate treatment, and avoiding unnecessary infringements of a person's liberty is of critical importance in a modern mental health service. Recent research examining the attitudes of psychiatrists<sup>2,3</sup> and service users<sup>4</sup> with regards to involuntary admission under the MHA 2001 suggests that, though significant concerns remain among psychiatrists regarding multiple aspects of implementation of the Act, service users reflected positively on their involuntary admission.

The vast majority of patients presenting for admission under the MHA are presenting outside of normal working hours; in just over half of all cases (56%), the medical recommendation is made by the patient's own general practitioner and in approximately one third of cases the admission order is completed by the patient's sector consultant. This may simply reflect the emergency nature of MHA admissions but the involvement of professionals who are

most familiar with patients potentially requiring detention under the MHA is to be preferred. There may be scope to plan MHA assessments so that a patient's own GP and Consultant Psychiatrist are involved in these decisions but this is obviously not always possible.

Approximately four out of every five patients presenting for admission under the MHA had an admission order completed and seventy five per cent of those patients where an admission order was not completed were admitted to hospital either as a voluntary psychiatric admission or to a general hospital ward. The latter figure highlights the importance of always considering an organic cause to a psychiatric presentation. Overall, only 4% of those presenting for admission under the MHA did not require inpatient treatment, indicating that the vast majority of patients presenting in these circumstances warranted referral to hospital.

The demographic characteristics and diagnoses of patients in this study were mainly similar to those of patients included in the Mental Health Commission's review of the MHA, though the study group had a higher proportion of patients with a diagnosis of schizophrenia. 22% (n=332) of those in the national statistics did not have a diagnosis recorded however and it is likely that at least some of these would have had a diagnosis of a schizophreniform illness. Rates for schizophreniform and affective illnesses were similar to recent studies in other centres.<sup>5</sup>

Those patients who were not detained were more likely to have a primary diagnosis of substance abuse related disorder or personality disorder and of course both personality disorder and alcohol or drug dependence are specifically excluded as conditions where admission under MHA 2001 is allowed. This is an interesting finding, highlighting the fact that general practitioners continue to recommend involuntary admission for those with a diagnosis of substance dependence despite the rules of the Act. It raises the issue as to whether forms which report substance dependence as the reason for admission should be automatically considered invalid if no other diagnosis is specified and rewritten if necessary. It appears that currently, the process tends to continue regardless of the reported illness mentioned on the application and recommendation forms.

One concern from the findings in relation to substance dependence might be that patients with a dual diagnosis who need admission may be prevented from being admitted as involuntary patients due to the stipulations in the Act. This however is unlikely to have been the case here as most (66%; n=8) of those with a diagnosis of substance abuse who were not detained had no other psychiatric illness recorded and none of this group has required involuntary admission since that presentation.

Patients who were not subsequently detained were more likely to have had an application made by a Garda and a medical recommendation made by a general practitioner who was not known to them. This group of patients were more likely to have been conveyed to the approved centre by the gardai and to have no past psychiatric history. These findings draw attention to the particular group of patients presenting for involuntary admission in emergency situations without the input of someone who is known

to them. These people tended not to require detention under the Act, and though these situations may be difficult to avoid, especially where the person is unknown to the service, every effort should be made by those making the application and recommendation to gain collateral from someone known to the patient so that any unnecessary referrals for involuntary admission could be avoided if possible.

This also emphasises the importance of appropriate training of those commonly involved in the process of involuntary admission and in particular, that it is essential to provide feedback to those parties where an inappropriate application is made. This is often overlooked in a busy service and it is frequently difficult to contact those who may have been involved in the emergency situation. There may be a role for introducing standard procedures whereby feedback should be carried out automatically by the team, for example, within a week to discuss the case and why the person did not require involuntary admission, where an application and recommendation have been made but the patient is not detained. This would hopefully reduce the frequency of such instances and improve communication between parties involved.

The legal criteria for making a medical recommendation for involuntary admission by a general practitioner or an admission order by a consultant psychiatrist are detailed on the relevant forms 5 and 6 respectively. The general practitioner or consultant psychiatrist must be satisfied that the patient is suffering from a mental disorder and that criterion (a), criterion (b) or both criteria (a) and (b) are satisfied. Criterion (a) refers to "a serious likelihood of the person concerned causing immediate and serious harm" to self or others and criterion (b) refers to the person's impaired judgement and that failure to admit the person "would be likely to lead to a serious deterioration" in their condition or "prevent the administration of appropriate treatment that could be given only by such admission" and that this "would be likely to benefit or alleviate the condition of that person to a material extent". Of note, recommendation and admission order forms originally only permitted a choice of either (a) or (b). The forms were revised, however, midway through the study in December 2007 following a court case, to add the possibility of both (a) and (b) applying.

In almost two thirds of cases there was agreement between the Consultant Psychiatrist and General Practitioner as to the reason for involuntary admission. However, General Practitioners seemed to have a significantly lower threshold for believing that the patient was a risk to themselves or others. This is not surprising given that Consultant Psychiatrists should be the most qualified to make an accurate assessment of risk. Also, it is much more appropriate that there is a tendency of general practitioners to over, rather than under estimate risk. Disagreements as to the reason for detention may be explained by the fact that the patient may have improved with treatment by the time they were assessed by the Consultant. Another explanation may be that General Practitioners may have a different understanding or interpretation of the term "serious and immediate risk" compared to Consultants.

A limitation of the study is that the number of people in the group who were not detained is small relative to the group who were detained. In addition, the group examined were from one catchment area and may not be representative of other services.

Most figures, however, are consistent with national statistics and therefore the profile of patients in other similar services would not be expected to differ greatly. The main strength of the study is that it provides a comprehensive profile of those all those presenting to an approved centre under the MHA 2001 over a substantial period of time, identifying a number of key areas of interest.

Conclusion

This study examines every case where a patient was brought to a busy acute unit for involuntary admission over a substantial time period. Over 70% of those presenting did so outside of normal working hours highlighting the emergency nature of acute psychiatry. Application and recommendation for involuntary admission is a serious process which impacts on a patient's freedom and should only occur in the best interests of the patient. It is particularly important to examine cases where the patient is not subsequently detained. Reassuringly, out of all of those presenting for involuntary admission, only 4% did not require any form of admission to hospital. Similar to recent research in this area,<sup>5</sup> the findings of this study suggest a need for further education for those involved in the process of application and recommendation, in particular for the Gardai and General Practitioners, and feedback where an inappropriate presentation for involuntary admission

occurs. Involuntary admissions most frequently occur in the context of emergency situations, however, it is clear that every effort should be made to involve people known to the patient in each step of the process where possible.

## Conflict of interest

None.

### References

- 1. Mental Health Commission. Report on the operation of part 2 of the Mental Health Act 2001(April 2008) available at http://www.mhcirl.ie/Publications
- O'Donoghue B., Moran B. Consultant psychiatrists' experiences and attitudes following the introduction of the Mental Health Act 2001: a national survey. Ir J Psych Med 2009 Mar; 26(1): 23, 24-6
- Jabbar F., Kelly BD., Casey P. National survey of psychiatrists' responses to implementation of the Mental Health Act 2001 in Ireland. Ir J Med Sci 2010; 179: 291-294
- O' Donoghue B., Lyne J., Hill M., Larkin C., Feeney L., O'Callaghan E. Involuntary admission from the patients' perspective. Soc Psychiat Epidemiol 2010; 45:631-638
- 5. Rafiq A., O'Hanlon M. An audit of incomplete involuntary admissions to an approved Irish centre. Ir J Psych Med 2010 Sep; 27(3): 143-147

Table 1: Comparison of study patients who were detained and the national statistics.

	Detained		National Figures <sup>1</sup>		X²/Fisher's Exact Test	OR 95% CI
	n	%	n	%		
Gender						
Male	80	58	831	55	0.25 0.54	1.10;
Female	59	42	632	45	0.26;p=0.61	0.77 to 1.56
Age						
18-64	114	82	1251	83		0.92:
65+	25	18	252	17	0.13;p=0.71	0.58 to 1.45
Diagnosis						
Schizophreniform illness	74	53	585	39	10.85;p=0.001*	1.79; 1.26 to 2.53
Mania	37	27	313	21	2.55;p=0.11	1.38; 0.93 to 2.05
Depression	8	6	84	6	0.0007;p=0.93	1.03; 0.49 to 2.18
Organic	13	9	84	6	3.24;p=0.07	1.74; 0.95 to 3.21
Substance related	5	4	57	4	0.01;p=0.92	0.95; 0.38 to 2.42
Personality	0	0	9	1	p=1.00	0.56; 0.03 to 9.75
Neurosis	2	1	22	1	p=1.00	0.98; 0.23 to 4.23
No Mental Illness	0	0	0	0	N/A	N/A
Applicant						
Relative	108	78	1034	69	4.76;p=0.03*	1.58; 1.04 to 2.39
Authorised Officer	4	1	102	7	p=0.07	0.41; 0.15 to 1.12
Member of Public	11	8	132	9	0.12;p=0.73	0.89; 0.47 to 1.70
Gardai	16	12	235	15	1.67;p=0.20	0.70; 0.41 to 1.20

Note: National figures relate to patients detained using Form 6 nationally in 2007.

\*statistically significant difference

Schizophreniform illness     74     53     6     19       Mania     37     27     5     16       Depression     8     6     2     6       Depression     13     9     3     9       Substance related     5     4     12     38       Depresonality     0     0     3     9       Neurosis     2     1     0     0       No Mental Illness     0     0     1     3       History of mental illness     122     88     17     53       Known to service     112     81     14     44       On Call Presentation     96     69     26     81       Applicant       Relative     108     78     20     63       Authorised Officer     4     1     0     0       Member of Public     11     8     2     6       Gardai     16     12     10     31       Arrival     53     38     10     31       Gardai only     34     24     16     50       Assisted admission     37     27     4     13       Ambulance     8     6     2     6 <t< th=""><th>0.60; 0.44  2119; 0.64  12.43; 0.0  1.70; 0.19  1.00  &lt; 0.0001;  0.01</th><th>0004*</th><th>95% CI  1.36 0.63 to 2.93  4.9 1.91 to 12.74 1.96</th></t<>	0.60; 0.44  2119; 0.64  12.43; 0.0  1.70; 0.19  1.00  < 0.0001;  0.01	0004*	95% CI  1.36 0.63 to 2.93  4.9 1.91 to 12.74 1.96
Male remaile 80 58 16 50	2119; 0.64 12.43; 0.0 1.70; 0.19 1.00 1.00 < 0.0001	0004*	0.63 to 2.93 4.9 1.91 to 12.74
Semale   S	2119; 0.64 12.43; 0.0 1.70; 0.19 1.00 1.00 < 0.0001	0004*	0.63 to 2.93 4.9 1.91 to 12.74
114   82   26   81	12.43; 0.0 1.70; 0.19 1.00 1.00 < 0.0001		1.91 to 12.74
Diagnosis Schizophreniform illness Schizophren	12.43; 0.0 1.70; 0.19 1.00 1.00 < 0.0001		1.91 to 12.74
Diagnosis       74       53       6       19         Mania       37       27       5       16         Depression       8       6       2       6         Organic       13       9       3       9         Substance related       5       4       12       38         Personality       0       0       3       9         Neurosis       2       1       0       0         No Mental Illness       0       0       1       3         History of mental illness       122       88       17       53         Known to service       112       81       14       44         On Call Presentation       96       69       26       81         Applicant       88       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       33       38       10       31         Gardai only       34       24       16       50         Assisted admission	12.43; 0.0 1.70; 0.19 1.00 1.00 < 0.0001		1.91 to 12.74
Schizophreniform illness     74     53     6     19       Mania     37     27     5     16       Depression     8     6     2     6       Depression     13     9     3     9       Substance related     5     4     12     38       Depressionality     0     0     3     9       Neurosis     2     1     0     0       No Mental Illness     0     0     1     3       History of mental illness     122     88     17     53       Known to service     112     81     14     44       On Call Presentation     96     69     26     81       Applicant     88     20     63       Authorised Officer     4     1     0     0       Member of Public     11     8     2     6       Gardai     16     12     10     31       Arrival     53     38     10     31       Gardai only     34     24     16     50       Assisted admission     37     27     4     13       Armbulance     8     6     2     6       Gransfer from another ward     7	1.70; 0.19 1.00 1.00 < 0.0001		1.91 to 12.74
Mania       37       27       5       16         Depression       8       6       2       6         Depression       13       9       3       9         Substance related       5       4       12       38         Personality       0       0       3       9         Neurosis       2       1       0       0         No Mental Illness       22       1       0       0         No Mental Illness       122       88       17       53         Known to service       112       81       14       44         On Call Presentation       96       69       26       81         Applicant       Relative       108       78       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       4       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Granife	1.70; 0.19 1.00 1.00 < 0.0001		1.91 to 12.74
Depression 8 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6	1.00 1.00 < 0.0001	9	1.96
Organic       13       9       3       9         Substance related       5       4       12       38         Personality       0       0       3       9         Neurosis       2       1       0       0         No Mental Illness       0       0       1       3         History of mental illness       122       88       17       53         Known to service       112       81       14       44         On Call Presentation       96       69       26       81         Applicant       8       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       5       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Gransfer from another ward       7       5       0       0	1.00		0.70 to 5.47
Substance related 5 4 12 38 Personality 0 0 0 3 9 Neurosis 2 1 0 0 0 No Mental Illness 0 0 1 3 History of mental illness 122 88 17 53 Known to service 112 81 14 44 On Call Presentation 96 69 26 81 Applicant Relative 108 78 20 63 Authorised Officer 4 1 0 0 0 Member of Public 11 8 2 6 Gardai 16 12 10 31 Arrival Samily/Nursing home 53 38 10 31 Gardai only 34 24 16 50 Ambulance 8 6 2 6 Gransfer from another ward 7 5 0 0 Recommendation by own GP	< 0.0001		0.92 0.19 to 4.54
Personality 0 0 0 3 9 Neurosis 2 1 0 0 0 No Mental Illness 0 0 1 3 History of mental illness 122 88 17 53 Known to service 112 81 14 44 On Call Presentation 96 69 26 81 Applicant Relative 108 78 20 63 Authorised Officer 4 1 0 0 Member of Public 11 8 2 6 Gardai 16 12 10 31 Arrival Family/Nursing home 53 38 10 31 Gardai only 34 24 16 50 Assisted admission 37 27 4 13 Ambulance 8 6 2 6 Fransfer from another ward 7 5 0 0 Recommendation by own GP		1.00	
Personality 0 0 0 3 9 Neurosis 2 1 0 0 0 No Mental Illness 0 0 1 3 History of mental illness 122 88 17 53 Known to service 112 81 14 44 On Call Presentation 96 69 26 81 Applicant Relative 108 78 20 63 Authorised Officer 4 1 0 0 Member of Public 11 8 2 6 Gardai 16 12 10 31 Arrival Family/Nursing home 53 38 10 31 Gardai only 34 24 16 50 Assisted admission 37 27 4 13 Ambulance 8 6 2 6 Fransfer from another ward 7 5 0 0 Recommendation by own GP			
No Mental Illness	0.01		
No Mental Illness   0	0.01		0.03 0.0015 to 0.60
History of mental illness	1.00		1.18 0.06 to 25.23
Known to service       112       81       14       44         On Call Presentation       96       69       26       81         Applicant       88       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	0.19		0.08
Known to service       112       81       14       44         On Call Presentation       96       69       26       81         Applicant       88       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	22.45;		0.00 to 1.89 7.06
On Call Presentation         96         69         26         81           Applicant         Relative         108         78         20         63           Authorised Officer         4         1         0         0           Member of Public         11         8         2         6           Gardai         16         12         10         31           Arrival         Family/Nursing home         53         38         10         31           Gardai only         34         24         16         50           Assisted admission         37         27         4         13           Ambulance         8         6         2         6           Transfer from another ward         7         5         0         0           Recommendation by own GP         84         60         11         34	< 0.0001* 18.24;		2.93 to 16.98 0.19
Applicant       Relative       108       78       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       Family/Nursing home       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	< 0.0001*		0.08 to 0.42
Relative       108       78       20       63         Authorised Officer       4       1       0       0         Member of Public       11       8       2       6         Gardai       16       12       10       31         Arrival       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	1.89; 0.17		0.52 0.20 to 1.35
Authorised Officer 4 1 0 0  Member of Public 11 8 2 6  Gardai 16 12 10 31  Arrival 53 38 10 31  Gardai only 34 24 16 50  Assisted admission 37 27 4 13  Ambulance 8 6 2 6  Transfer from another ward 7 5 0 0  Recommendation by own GP			0.20 (0 1.55
Member of Public 11 8 2 6 Gardai 16 12 10 31  Arrival Family/Nursing home 53 38 10 31  Gardai only 34 24 16 50  Assisted admission 37 27 4 13  Ambulance 8 6 2 6  Transfer from another ward 7 5 0 0  Recommendation by own GP	3.19; 0.07		2.09 0.92 to 4.75
Gardai       16       12       10       31         Arrival       Family/Nursing home         53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	1.00		2.09
Gardai 16 12 10 31  Arrival 53 38 10 31  Gardai only 34 24 16 50  Assisted admission 37 27 4 13  Ambulance 8 6 2 6  Transfer from another ward 7 5 0 0  Recommendation by own GP	1.00		0.11 to 39.90 1.25
Arrival       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34			0.26 to 5.93
Family/Nursing home       53       38       10       31         Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34	7.86; 0.0051*		0.29 0.12 to 0.71
Gardai only       34       24       16       50         Assisted admission       37       27       4       13         Ambulance       8       6       2       6         Transfer from another ward       7       5       0       0         Recommendation by own GP       84       60       11       34			
Assisted admission 37 27 4 13  Ambulance 8 6 2 6  Transfer from another ward 7 5 0 0  Recommendation by own GP	N/A	0.53; 0.47	1.36 0.60 to 3.09
Ambulance 8 6 2 6  Transfer from another ward 7 5 0 0  Recommendation by own GP		8.20;	0.32
Transfer from another ward 7 5 0 0  Recommendation 84 60 11 34 by own GP		<b>0.0042*</b> 0.11	0.15 to 0.72 2.54
Transfer from another ward 7 5 0 0  Recommendation 84 60 11 34 by own GP	N/A	1.00	0.83 to 7.73 0.92
Recommendation 84 60 11 34 by own GP			0.19 to 4.54
by own GP	N/A	0.35	3.68 0.20 to 66.14
by own GP	N/A	7.15	2.92
Assessed by 52 37 11 34		0.0075*	1.30 to 6.52
sector consultant	N/A	0.10; 0.75	1.14 0.51 to 2.56
Collateral Available 112 81 29 91	N/A	0.21	0.43
Current Substance Use 35 25 14 44		4.39;	0.12 to 1.51 0.43
English speaking 137 99 30 94		<b>0.0362*</b> 0.16	0.20 to 0.96 4.57

<sup>\*</sup> statistically significant difference

Table 3. Criteria used for recommendation and admission

Criteria for admission	General Practitioner		Consultan	t Psychiatrist	Statistic
	n	%	n	%	
(a)	56	40	28	20	X <sup>2</sup> =12.52;p=0.0004*
(b)	70	50	95	68	$X^2 = 8.57; p=0.0034*$
(a) and (b)	10	7	17	12	X <sup>2</sup> =2.01;p=0.1563
Neither	4	3	0	0	Fisher's exact test; p=0.1223

<sup>(</sup>a)=Risk of immediate and serious harm to self or others.

Table 4. Outcome where admission order was not signed

	n	%	
Voluntary admission	22	69	
Discharge	8	25	
Other admission (e.g. medical)	2	6	
Involuntary admission within one week	2	6	

Note: those who were admitted as involuntary patients within one week are also included in the numbers of patients admitted voluntarily, discharged or admitted medically.

<sup>(</sup>b)=Risk of serious deterioration etc.

<sup>\*</sup>statistically significant difference