The Vron – An Early Intervention In-patient Recovery Unit

Rob Macpherson, Pradeep Peddu, Chris David

Ir J Psych Med 2012; 29 (2): 113-116

Abstract

Background and aims: This paper describes the context in which the Vron, a six-bedded 24-hour nursed care unit, has developed its role from a fast track rehabilitation unit, to work explicitly within an early intervention service. The study aimed to evaluate the work of the Vron by examining the change in CANSAS, HoNOS and EM scores between admission to and discharge from the unit.

Results: Approximately half of the admissions to Vron were from acute psychiatric wards. Most patients were discharged to their own tenancy or supported accommodation. There was a significant reduction in mean HoNOS score and increase in mean EM score during admission. Mean staff and patient-rated unmet needs reduced in the course of admission. In the course of admission, approximately half of the patients developed occupational roles.

Discussion and conclusions: The findings of this service evaluation must be interpreted with caution in view of the methodological limitations, in particular the lack of a comparator service intervention. However, it is suggested that units of this type may have a useful role in the rehabilitation of patients with complex severe mental illness, particularly if deployed at an early stage in an individual's illness, to prevent development of disability. The Vron focuses on a number of specific clinical and social areas which align with typical strategies in early intervention.

Key words: outcome, rehabilitation, early intervention.

Introduction

This paper describes the Vron, a 24-hour nursed-care unit, which has developed its role in recent years to focus increasingly on early intervention with a younger group of patients, at an early stage of their illness history. The work of this unit was described previously as a "fast track" rehabilitation facility, which aimed to "prevent new long stay patients and block revolving door admissions".[1] In the 1990s, the unit mainly worked with patients who were admitted from acute wards, and the average age was 35 years. Rehabilitation in the Vron was associated with significant reduction in hospitalisation over the following two years.[1] The unit is staffed by psychiatric nurses and the approach is to work, generally over a period of months, with patients suffering from complex, treatment resistant, severe mental illness, maximising medication responses and using a range of psychosocial interventions to improve social and vocational functioning. Mostly referrals to the Vron are triggered by staff in-inpatient services where a patient has such complex, ongoing needs for support and treatment, that discharge to the community is not possible.

The rehabilitation services in Gloucestershire have undergone major change over the past decade. Between 1997 and 2007 there was a reduction in the county from seven to three 24-hour nursed care units, with a loss of 22 24-hour nursed care beds. Reorganisation of in-patient services led to the loss of two rehabilitation hospital wards. Community rehabilitation teams were developed into assertive outreach teams, of which there are now three in the county. Traditional, generic locality-based community mental health teams were re-designed to become functional teams focusing on early intervention (targeting individuals up to 35 years with first onset psychosis), crisis/home treatment (which aims to prevent psychiatric admission), primary care assessment and treatment (focusing on common mental disorders and assessment of cases in primary care), recovery (the longer-term care of individuals with severe mental illness) and assertive outreach (targeting people with severe mental illness who are difficult to engage). The reduction of 24-hour nursed care beds was associated with an increase in individual 'care packages', which are mostly individual tenancies in flats or bungalows, with domicillary care (up to 24 hours per day in some cases), provided largely by three local social/health care organisations.

In this context, it was proposed that within the new, functionally defined mental health services commissioned by the PCT, there should be two longer-term rehabilitation/ recovery 24 hour nursed care units, which focus on the active rehabilitation, ideally up to two years, of patients who have enduring symptoms and disability, and as a result cannot be discharged from hospital. The re-deployment of the Vron as a part of early intervention services seemed appropriate as the unit's role recently had increasingly adapted to promote engagement with service patients at an early stage, in a positive and recovery orientated manner.

Method

As part of its changing role, it was decided in 2003 to incorporate routine outcome measurements as a standard part of the treatment of all cases in the Vron. The Camberwell Assessment of

*Rob Macpherson,
Consultant Psychiatrist,
Wotton Lawn, Horton Road, Gloucester, GL1 3WL, England
Email rob.macpherson@glos.nhs.uk

Pradeep Peddu,
Specialist Registrar,
2gether NHS Foundation Trust, Wotton Lawn, Horton Road, Gloucester, GL1 3WL, England

Chris David, Manager
The Vron, 25 Estcourt Road, Gloucester, England

Work carried out in: 2Gether NHS Foundation Trust, Gloucestershire, England

Submitted 16th October 2009
Accepted 28th January 2012

*correspondence

https://doi.org/10.1017/S0790966700017407 Published online by Cambridge University Press

Need Short Appraisal version (CANSAS) 2, the Engagement Measure (EM) 3 and the Health of the Nation Outcome Scores (HoNOS) 4 were rated at the time of admission to the Vron and then at points of significant review throughout admission, and again at the end of the admission, in the lead up to discharge.

The CANSAS assesses patient, staff and potentially carer perception of need across 22 health/social care domains. Ratings are 0 (no need), 1 (no/moderate problem due to help given, indicating met need) or 2 (unmet need). All staff had training in the use of CANSAS and were asked to support patients if they needed help to complete forms, but not to influence them, so that patient ratings would be genuinely independent from the staff ratings. HoNOS is a 12-item observer-rated measure of social disability, with a 5-point scale with anchor points provided for each 10-point interval. The EM is an 11-item observer rated scale which scores on a 5-point Likert scale 6 dimensions of engagement: appointment keeping, client-therapist interaction, communication, perceived acceptance of treatment, collaboration and compliance with medication. Aggregated scores range 11 to 55, 33 being proposed as a cut off for good/poor engagement.

It was intended to use rating scales within the unit to assist care planning and clinical management and to provide feedback to patients, regarding progress. When it was subsequently proposed to use these in a retrospective way to evaluate the service, it was agreed that ratings made on admission and prior to discharge from the Vron would be considered. In a small number of cases, carer ratings had also been completed but it was recognised that these were insufficient to be representative. They have not, as a result, been included in this paper.

This study was carried out as a service evaluation, the protocol for which was developed with support from the Gloucestershire research and development support unit and formally agreed by the research governance committee in Gloucestershire Partnership NHS Trust in 2007. Formal ethical committee submission was not required.

Results

Between 2003 and 2007 there were 35 referrals to the Vron. Results were only considered for the 24 patients who were treated for a minimum of two months in the Vron, to allow for a realistic period of intervention. Demographic and illness related data for these patients are presented in Table 1. It can be seen that there was a substantial increase in the number of patients having their own tenancy at the point of discharge from the Vron, and an increase in various forms of occupation.

Tables 2 and 3 show the HoNOS, EM and CANSAS scores at admission and discharge from the Vron. As noted in the tables, some data were missing. It can be seen that there were relatively few unmet needs remaining after treatment in the Vron, but there was no over representation of unmet need in particular CANSAS domains at this time. In general, there seemed to be good concordance between rating of needs by staff and patients, although this was not formally assessed within the present study.

Discussion

The main findings of this service evaluation were that in the course of treatment in the Vron early intervention recovery unit, there was a significant reduction in total HoNOS scores and increase in total EM scores, between admission and discharge to the unit. Staff and patient-rated met needs increase significantly between admission and discharge, while staff and patient rated mean unmet needs reduced significantly. Patients were admitted from a variety of placements, roughly half from psychiatric wards. They were discharged predominately to their own tenancy or supported

Table 1 Demographic and illness related data

Sex		Male: 21, Female: 3
Marital Status		Single: 24
Age on admission		Range 16-42, mean 24.6 years (SD 7.5) years
Duration of admission		Mean 9.9 months, range 3-26, SD 7.5
Admitted from:	Family home	6
	Acute psychiatric ward	10
	Own tenancy	3
	Supported accommodation	3
	Low security unit	2
Mean total number previous psychiatric admissions		1.25 (range 1 – 2)
Occupation on admission:	Unemployed	23
	Voluntary work	1
Discharged to:	Family home	3
	Acute psychiatric ward	0
	Own tenancy	13
	Supported accommodation	6
	Group training home	2
Occupation on discharge: (full/part time)	Unemployed	12
	Voluntary work	1
	Student	4
	Employed	3
	Sheltered employment	4

https://doi.org/10.1017/S0790966700017407 Published online by Cambridge University Press

Table 2. Mean HoNOS and EM scores at admission and discharge		
Mean total HoNOS score (total 17 pairs data)	28.3 (range 19-40, SD 5.6)	15.1 (range 7-23, SD 5.4)
Mean total EM score (total 22 pairs data)	28.1 (range 11-38, SD 6.6)	46.0 (range 21-55, SD 7.4)

*Note: Limited number of full paired data sets due to missing data. In both cases, p<0.001

Table 3. Mean CANSAS met and unmet need scores at admission and discharge

	Admission scores	Discharge scores	p value (Wilcoxon matched pairs signed ranks tests)
Staff-rated mean met needs	7.8 (range 2-12, SD 3.9)	16.3 (range 11-21, SD 3.3)	0.008
Staff-rated mean unmet needs	11.8 (range 7-16, SD 3.5)	3.6 (range 1-8, SD 2.9)	0.005
Patient self-rated mean met needs	8.7 (range 2-12, SD 3.5)	17.0 (range 14-21, SD 2.7)	0.005
Patient self-rated mean unmet needs	11.5 (range 7-19, SD 4.0)	3.5 (range 1-8, SD 2.9)	0.005

*Note: Total number of paired scores was 10, due to missing data.

accommodation. Most were unemployed on admission, while half were carrying out some form of employment at the point of discharge.

The results of this service evaluation need to be treated with some caution. The results related to a heterogeneous sample in one unit, which makes it difficult to generalise results. There were no inclusion/exclusion criteria, referrals to the Vron being assessed clinically regarding the likelihood of effective engagement and perceived benefits for the patient at that time. The study was retrospective and may have been subject to rating bias, although to try to avoid this simple, easy-to-rate instruments, which have obvious face validity, were used. This was not a randomised, controlled trial and the lack of a comparator means that it is not possible to know how the patients would have progressed in standard community treatment or within a different form of supported accommodation. The lack of data regarding progress after discharge means that it is not possible to judge how patients managed in the community, arguably the real challenge to most patients, although follow-up data referred to in an earlier study[1] were positive. There was a marked gender imbalance (21 of 24 patients being male) and this may be important as men with severe mental illness are known to have poorer outcomes.

However, the results of this study add to the data previously cited in this paper from the unit,[1] which indicate that for many service patients there appears to have been a significant positive change in the course of admission to the Vron. We felt there were likely to be multiple reasons for the good outcomes found: the unit focuses on helping people with diagnosis schizophrenia and other severe mental illnesses and there is a strong focus on employing effective treatment, for example early use of Clozapine and as an in-patient service, ensuring compliance. The unit is 'dry' and harmful effects of substance abuse were reduced by staff efforts to maintain this policy (not, of course, always successfully). We are not aware of any previous studies which have evaluated 24-hour-nursed care by use of routine outcome measurement. A previous review[5] found that this form of service was generally effective in supporting most patients referred, with improvements in social functioning, higher levels of social networks and reduced negative symptoms. These findings were echoed in the present study.

The Vron operates alongside a range of private and charitable services which provide longer-term supported accommodation. While in theory services like the Vron may have a place in helping individuals to live more normal and independent lives, in order to understand the need for different forms of supported accommodation in a locality, a 'total system approach' is needed, taking account of all services including charitable and private provision.[6] In England and Wales the 'Supporting People' policy initiative[7] was intended to facilitate this but it is not clear whether, in the complex mixed economy of modern residential case, this aim has been achieved.

Our results suggest that some of the important components for a unit of this type to be successful include: attention to occupation and activity, focus on identifying appropriate accommodation, and an attempt to maximise the benefits from psychiatric treatment and engagement in individual and family-based psychosocial interventions. Hopefully, as the unit strengthens its links with the early intervention community mental health team across the County it will be possible to use beds flexibly for functions including crisis/respite, assessment and treatment initiation of specific forms of treatment. It appears that many patients could benefit from treatment in a unit of this type, and this finding could be used to argue for the development of this form of service in other areas.

It is hoped that the future role of the Vron will continue to evolve. Its place within the early intervention services seems appropriate and fits with the observation that over the course of the last 10 years the average age of residents has dropped to 25 years. In recent years, in addition to its traditional rehabilitative focus, the Vron has progressively developed to carry out work on substance abuse, formal psychosocial intervention work, social and vocational roles development and a significant role in assessing social skills/circumstances, which can be used to identify

https://doi.org/10.1017/S0790966700017407 Published online by Cambridge University Press

appropriate longer-term needs for support and appropriate accommodation. It is hoped that it will continue its role as an effective alternative to hospital admission, as well developing other, broader roles, serving the early intervention population.

We would be interested to hear from colleagues working in other localities, regarding the experience of working in similar units.

Acknowledgements

The authors would like to acknowledge the support of Julie Bundy in preparing this manuscript for submission and thank Genevieve Riley for support with managing the data. We would also like to acknowledge Chris Foy, Medical Statistician at the Gloucestershire R&D Support Unit for advice and guidance on statistical analysis. We also thank colleagues and patients in the Vron for their contribution.

Conflict of interest

None.

References

1. Macpherson, R, Butler, J. Effect of treatment in an active rehabilitation hostel on the need for hospital treatment. *Psychiatric Bulletin*; 1999, 23, 594-597.
2. Slade, M, Bick, A., Bindman, J. Routine outcome measurement for those with severe mental illness: CANSAS and HONOS. *The British Journal of Psychiatry*; 1999, 174, 404-408.
3. Hall, M, Meadon, A, Smith, J. Brief Report: The development and psychometric properties of an observer rated measure of engagement with mental health services. *The Journal of Mental Health*, 2001, 10, 457-465.
4. Wing, J.K., Reevor, A.S., Curtis, R. Health of the Nation Outcome Scales (HoNOS) Research and development. *The British Journal of Psychiatry*; 1998, 172, 11-18
5. Macpherson, R, Shepherd, G, Edwards T. Supported accommodation for people with SMI: a review. *Advances in Psychiatric Treatment*, 2004, 10, 180-188.
6. Shepherd, G.. System failure? The problem of reductions of long stay beds in the UK. *Epidemiology and Social Psychiatry*; 1998, 7, 127-134.
7. Department of the Environment, Transport and the Regions. Supporting People – policy into practice. 2001; London: DETR.

https://doi.org/10.1017/S0790966700017407 Published online by Cambridge University Press