

Hospital and rehabilitation services

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Deinstitutionalization has left hospitals with a modified role, in which coercion and violence are a particularly common problem. Numerous studies, often based on comprehensive data sets, have investigated predictors of outcome such as rehospitalization rate, duration of stay and violent incidents. The variance explained by patient characteristics and baseline variables has been rather small, however, rendering it of little use for predicting individual cases. Clinical practice in hospitals varies – even more so in partial hospitalization programmes – and seems to depend more on the ideology and policy of the hospital and on the quality of community care services than on patient factors. How policy interventions can influence practice, however, and ultimately improve individual outcome, is still poorly understood. In the rehabilitation of schizophrenia patients, the relation of specific cognitive deficits to differential outcomes may facilitate the development of targeted interventions. However, advances in empirical research worthy of the prevailing optimism in the field are still eagerly awaited though. In vocational rehabilitation, individual placement and support in competitive employment has been shown to be a more effective alternative than conventional strategies. In general, there is a trend towards more intensive and individualized specific rehabilitation programmes. *Curr Opin*

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Introduction

Throughout the Western industrialized world, deinstitutionalization of mental health care has led to a reduction in the number of hospital beds and to the establishment of various and often innovative outpatient and community services. This has left the hospital at the less glamorous end of the mental health care spectrum. Nevertheless, in the care of patients with severe mental illness, this still eats up the lion's share of direct treatment costs and serves an essential, albeit modified, function. In relation to the number of beds, there has been a relative increase in compulsory admissions and coercion [1•]. Despite its importance, hospital treatment appears to be somewhat under-researched, which is reflected in the paucity of controlled studies that investigate the effectiveness of specific treatment strategies in inpatient facilities. Research seems to focus more on determinants of bed use and predictors of outcome in naturalistic designs. The quality of such studies, however, depends on the comprehensiveness and accuracy of the available data sets, which show significant international variation.

Hospital care

While most of the research pertaining to hospital care has focused on the analysis of patient characteristics to predict outcome, this work is well complemented by studies analysing on a more global level, the interdependency between the utilization of hospital and community based services.

Bed use and duration of stay

Characteristics of patients treated in inpatient units, the proportion of compulsorily admitted patients, duration of stay, and discharge destination change over time [2,3], and may vary greatly depending on the type of hospital, funding arrangements, characteristics of community care services and hospital policy [4–7,8•]. An analysis of regional differences in Finland [9••] revealed that number of beds and admission rates, readmission rates, compulsory treatment and outpatient care are strongly interdependent. Attempts to profile frequent users of inpatient services yield consistent findings; young and predominantly male patients with a psychotic/mood disorder account for over half of multiple admissions [10,11]. In addition, number of previous admissions, severity of illness [12–14] and coexistence of a physical illness, particularly in depressed patients [15], are also predictive of duration of stay.

The Nordic comparative study [8*] identified and followed up a group of patients who used only inpatient care over one year (i.e. 12% of a total cohort of new contacts). Overall, this group received less inpatient care than those who used both inpatient and outpatient services, suggesting that there is a group of predominantly male patients with dependencies and functional psychosis who are socially isolated, and not in contact with outpatient services. Likewise, patients who discharged themselves from inpatient care against medical advice failed to engage with services [16]. They also tended to be male with dual diagnoses, more severe psychopathology and higher rates of rehospitalization during 1-month follow up. Continuity of care, between inpatient and outpatient settings [17], and flexible, intensive community care, including 24-h emergency services, may help to target these difficult-to-engage groups and provide more effective care. More intensive outpatient care has indeed been found to be related to decreased readmission rates [9**].

Coercion and aggression

In a typical integrated health care system, the most frequent sites of assault are psychiatric inpatient wards, where half of all assaults occur [18,19]. Two issues prevail in the relevant literature: attempts to characterize patients who are violent; and staff training in and management of violence. Male patients with comorbid psychosis and substance use disorders or personality disorders are more likely to perpetrate assault [19,20]. Repetitively violent patients, who tend to be older, have a history of violence and be involuntarily detained, may account for more than two-thirds of all violent incidents [21]. Only a weak association has been found between aggression and the amount of physical space, leading Nijman and Rector [22] to conclude that 'psychological space' (e.g. privacy) may be more salient in triggering aggression.

Injuries are most common among nursing personnel [18–20], although one-third of psychiatric trainees are physically assaulted during a typical training period of 4 years [23]. It is widely agreed that training in the management of violent behaviour is often inadequate, and a more systematic approach to training is unanimously advocated [5,18–20,23,24]. The increase in coercive activities [1*], the striking differences in the use of compulsory care across psychiatric services [25*,26], what patients perceive as coercive [27] and the negative emotional impact of psychiatric admission on patients [28] are all factors that should be addressed in staff training. Certainly, quality of staffing is supposed to be a protective factor, and increased expenditure on staffing has been linked to less frequent assault in an inpatient unit [19]. However, there appears to be little attention paid to the development and systematic testing

of specific interventions (apart from seclusion [29]) for at-risk patients, which, combined with adequate staffing and staff training, might effect a decline in assaultive behaviour.

Satisfaction

For at least 25 years, patients' satisfaction has been regarded as a relevant outcome criterion for evaluating psychiatric treatment, so how satisfied are patients with psychiatric hospital care? The majority of patients are explicitly satisfied, but this finding is meaningless because the mean satisfaction score on any scale is approximately two-thirds towards the positive end of the scale for whatever is being assessed, and psychiatric patients tend to express satisfaction with any treatment. It has been repeatedly reported [30*] that acute psychiatric inpatients, younger patients, those detained involuntarily and, in particular, patients with a higher degree of depressive mood are comparatively less satisfied with treatment. For identifying dissatisfaction, it seems necessary to specifically ask about pertinent aspects of the treatment under evaluation [26,30*]. Continuity of care, provision of information and crisis care have been identified as areas that patients are rather dissatisfied with [26,31].

Although most studies of satisfaction with services continue to assess satisfaction in one sample at a single point of time [30*,31,32], and methodological problems such as selection through nonresponse [33] are problematic, comparative studies of satisfaction are more informative. Psychiatric patients were significantly less satisfied with treatment than were nonpsychiatric medical patients [34]. In studies that compared psychiatric services patients have been mostly, but not consistently, found to be more satisfied with community services and partial hospitalization than with hospital care [26].

Partial hospitalization

Partial hospitalization is a vague term that is used for describing very different treatment programmes. They may be an alternative to acute inpatient care or provide specific treatment for defined groups, such as patients with obsessive–compulsive disorder [35]. Hence, characteristics of patients and severity of illness vary more in day hospitals than in inpatient units [36**].

A study that compared short-term residential care and acute psychiatric hospital treatment [36*] showed that the two facilities admitted patients with similar levels of disturbance. Both programmes led to a significant and comparable clinical improvement. Treatment costs in residential care were approximately half those of the hospital setting, however.

Service development

Studies investigating how outcome of hospital care (e.g. duration of stay, rehospitalization rates, violent assaults) may be predicted by patient characteristics and other baseline variables yield interesting results. The amount of variance explained by such predictors is usually too small by far to be used for prediction in individual cases, however [13,37]. The variation in clinical practice seems to depend less on patient characteristics, and more on the type of hospital and its policy. Precisely what inpatient and partial hospitalization programmes provide, their ‘treatment ideology’, characteristics of the setting and the treatment components are often poorly described in research papers. Thus, interpretation of findings and development of programmes are rendered difficult.

Arising from surveys and quality management programmes, recommendations have been published on discharge policies [38,39], improving pharmacotherapy in hospitals [40], a more rigorous approach to assigning observation levels [41], and how to conduct proper physical examinations [42]. There are suggestions for specialist mother/baby units [43], a recentralization of forensic hospitals [44], and a more prominent role for liaison psychiatrists in working with general practitioners [45] and in general hospital settings [46]. Improvement and management of quality of hospital care remains an important issue, and hospitals may have to implement substantial changes in organization and policy to adapt successfully to the changing market place and to meet the demands of funders [47]. A small-scale study [48•] demonstrated that a nonsmoking policy on an acute ward was not associated with severity or improvement of psychopathological symptoms in smokers as compared with nonsmokers.

In general, however, how policy interventions may be designed and implemented for improving clinical practice and treatment outcome still appears poorly understood and under-researched. Moreover, adequate methods for assessing the association between interventions on a policy level, clinical practice and individual outcome have not yet been fully developed [49,50]. Methodologically rigorous studies, including controlled trials, which are widely regarded as the gold standard in other areas of health services research, to test the effectiveness of well defined hospital treatment programmes are widely missing. They may, for various practical and ethical reasons, be difficult to carry out, but seem desirable for improving the quality of hospital care.

Rehabilitation services

Both theoretical contributions and more practical interventions are well represented in current psychiatric rehabilitation research, with some groups admirably

combining the two side-by-side in a single research programme.

Cognitive rehabilitation

An area that has received much attention in recent years is cognitive impairment in schizophrenia and the corresponding rehabilitation efforts. Attempts to relate profiles of cognitive deficits to differential outcomes are ongoing. Which impairments are related to which outcomes remains elusive, however. Extensive neuropsychological assessment of schizophrenia patients at admission and regularly thereafter failed to reveal any differences between discharged and nondischarged patients on any measures, except a perceptual disorganization task [51]. Thus, although the idea of identifying individual cognitive deficits and then applying specific rehabilitation strategies accordingly seems attractive, as Bellack *et al.* [52••] pointed out, ‘Optimism has outpaced progress’. As long as there are problems in identifying relevant targets for rehabilitation, current strategies that focus on enhancing cognitive functioning may not be appropriate. Instead, it may be more beneficial to concentrate on strategies for minimizing cognitive load or compensating for, rather than attempting to repair, deficits [52••]. Given that it has not yet been shown that amelioration of deficits is essential for successful rehabilitation, this appears to be a prudent strategy.

On the other hand, cognitive–behavioural interventions are well established as an effective form of treatment for persistent auditory hallucinations. Until now, treatment has been delivered on an individual basis. In a preliminary, noncontrolled study [53•], group treatment as a less costly alternative led to significant changes in perceived power of and distress caused by voices. This underlines that pragmatic strategies that do not rely on remediating the suspected underlying deficit may be adequate progress for the time being.

Service development

For the rehabilitation of patients with severe mental illness, special teams and programmes have been set up in many areas. Work in progress includes the training of rehabilitation teams [54,55], the use of technologies in psychiatric rehabilitation [56] and individually tailored rehabilitation programmes [57], but this work has not yet been properly evaluated. A potential drawback of such programmes is that they function largely independently of other mental health services, leading to further fragmentation of care. Rehabilitation services may benefit from employing prosumers (i.e. former consumers of services) as staff members, in posts equal to nonconsumer provider posts [58•]. This may require organizational changes in the service and a shift in the agency’s culture. This, however, may positively impact on respect towards patients and patients’ expectations of care.

A long-standing issue in vocational rehabilitation has been whether patients should be placed in competitive employment and supported there, or whether they should participate in stepwise vocational programmes. This issue was addressed in a randomized controlled trial comparing individual placement and support with traditional vocational rehabilitation [59••]. Individuals in the individual placement and support condition were assisted by an employment specialist within the community mental health team to gain competitive employment, and received unlimited ongoing support. Participants in this programme were more likely to be competitively employed than individuals receiving enhanced vocational rehabilitation, in which stepwise vocational services were delivered by rehabilitation agencies. The latter group were more likely to be in sheltered employment and seemed to get stuck in the transition from sheltered to competitive employment. Total earnings, job satisfaction and nonvocational outcomes were similar for the two groups.

Drake *et al.* [59••] pointed out that the answer to the question regarding which programme is better depends not only on the demonstrated effectiveness of interventions, but also on underlying values: 'Do we believe it is better to integrate people with mental illness into mainstream society, or do we want to maintain separate working settings and keep them segregated from society?' (p. 632). The values that will determine the future development of rehabilitation and of mental health care in general are set by political processes in society as a whole, and by the commissioners of services in particular [60]. A more intensive discussion in the literature of these values, their changes over time and their considerable differences across nations might be helpful for a better understanding of what determines rehabilitation practice and of how services might be best developed to meet future demands.

References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

- 1 Munk-Jørgensen P. Has deinstitutionalisation gone too far? *Eur Arch Psychiatry Clin Neurosci* 1999; 3:136–143.
This paper discusses some negative consequences of the (inappropriate) deinstitutionalization process based on data from the Danish psychiatric case register.
- 2 Mechanic D, McAlpine DD, Olsson M. Changing patterns of psychiatric inpatient care in the United States, 1988–1994. *Arch Gen Psychiatry* 1998; 55:785–791.
- 3 Korkeila JA, Lehtinen V, Tuori T, Helenius H. Frequently hospitalised psychiatric patients: a study of predictive factors. *Soc Psychiatry Psychiatr Epidemiol* 1998; 33:528–534.
- 4 Kipp J, Kristen R, Kunze H, Schmied HP, Thies J. Basic documentation: hospital services for a region by a mental hospital and a psychiatric department of a general hospital. Results of a joint evaluation [in German]. *Nervenarzt* 1998; 9:782–790.

- 5 Ford R, Durcan G, Warner L, Hardy P, Muijen M. One day survey by the Mental Health Act Commission of acute adult psychiatry inpatient wards in England and Wales. *Br Med J* 1998; 7168:1279–1283.
- 6 Gebhardt RP, Steinert T. Structure of care in psychiatric hospital units 22 years after the 'psychiatrie-enquete' [in German]. *Nervenarzt* 1998; 9:791–798.
- 7 Etner SL, Hermann RC. Inpatient psychiatric treatment of elderly Medicare beneficiaries. *Psychiatr Serv* 1998; 9:1173–1179.
- 8 Saarento O, Kastrup M, Lonnerberg O, Gostas G, Muus S, Sandlund M, *et al.*
• The Nordic comparative study on sectorized psychiatry: patients who use only psychiatric in-patient care in comprehensive community-based services – a 1 year follow-up study. *Acta Psychiatr Scand* 1998; 2:98–104.
The authors identified and described patients who used only inpatient care over 1 year whose needs were not being met by existing services and, in addition, found significant relationships between utilization of inpatient and outpatient services.
- 9 Korkeila JA, Lehtinen V, Tuori T, Helenius H. Regional differences in the use of psychiatric hospital beds in Finland: a national case-register study. *Acta Psychiatr Scand* 1998; 3:193–199.
•• This paper reports marked regional differences in treatment practices related to bed use, rates of admission, readmission, compulsory care and duration of stay that could not be attributed to differences in morbidity and appear to be influenced by local service configuration and practice.
- 10 Fisher S, Stevens RF. Subgroups of frequent users of an inpatient mental health program at a community hospital in Canada. *Psychiatr Serv* 1999; 2:244–247.
- 11 Maynard C, Cox GB. Psychiatric hospitalisation of persons with dual diagnoses: estimates from two national surveys. *Psychiatr Serv* 1998; 12:1615–1617.
- 12 Huntley DA, Cho DW, Christian J, Csermanky JG. Predicting length of stay in an acute psychiatric hospital. *Psychiatr Serv* 1998; 49:1049–1053.
- 13 Weinberg A, Greaves J, Creed F, Tomenson B. Severity of psychiatric disorder in day hospital and in-patient admissions. *Acta Psychiatr Scand* 1998; 3:250–253.
- 14 Vetter PH, Köller O. First hospitalised versus rehospitalised patients with an affective disorder or schizophrenia: difference in long-term course and outcome. *Psychopathology* 1998; 31:260–264.
- 15 Sloan DM, Yokley T, Gottesman H, Schubert DSP. A five-year study on the interactive effects of depression and physical illness on psychiatric unit length of stay. *Psychosom Med* 1999; 1:21–25.
- 16 Pages KP, Russo JE, Wingerson DK, Ries RK, Roy-Byrne PP, Cowley DS. Predictors and outcome of discharge against medical advice from the psychiatric units of a general hospital. *Psychiatr Serv* 1998; 9:1187–1192.
- 17 Oe M, Okagami K. Community based care for the mentally disordered in Kawasaki City: experiences from Kawasaki City Psychiatric Rehabilitation Centre. *Psychiatry Clin Neurosci* 1998; 52 (Suppl):S359–S363.
- 18 Blow FC, Barry KL, Copeland LA, McCormick RA, Lehmann LS, Ullman E. Repeated assaults by patients in VA hospital and clinic settings. *Psychiatr Serv* 1999; 3:390–394.
- 19 Lehmann LS, McCormick RA, Kizer KW. A survey of assaultive behavior in veterans health administration facilities. *Psychiatr Serv* 1999; 3:384–389.
- 20 Owen C, Tarantello C, Jones M. Repetitively violent patients in psychiatric units. *Psychiatr Serv* 1998; 11:1458–1461.
- 21 Owen C, Tarantello C, Jones M, Tennant C. Violence and aggression in psychiatric units. *Psychiatr Serv* 1998; 49:1452–1457.
- 22 Nijman HLI, Rector G. Crowding and aggression in inpatient psychiatric wards. *Psychiatr Serv* 1999; 6:830–831.
- 23 Nijman HLI, Campo JMLG, Ravelli DP, Merckelbach HLGJ. A tentative model of aggression on inpatient psychiatric wards. *Psychiatr Serv* 1999; 6:832–834.
- 24 Schwartz TL, Park TL. Assaults by patients on psychiatric residents: a survey and training recommendations. *Psychiatr Serv* 1999; 3:381–383.
- 25 Hansson L, Muus S, Saarento O, Vinding HR, Göstas, Sandlund M, *et al.* The
• Nordic comparative study on sectorized psychiatry: rates of compulsory care and use of compulsory admissions during a 1-year follow-up. *Soc Psychiatry Psychiatr Epidemiol* 1999; 34:99–104.
This is a large-scale prospective study that found 'psychiatric service' was the best predictor of compulsory admission, with a range of 4–53% in the rate of compulsory admission across services.
- 26 Lidz CW, Mulvey EP, Hoge SK, Kirsch BL, Monahan J, Eisenberg M, *et al.* Factual sources of psychiatric patients' perceptions of coercion in the hospital admission process. *Am J Psychiatry* 1998; 9:1254–1260.

- 27 Morrison AP, Bowe S, Larkin BE, Northard S. The psychological impact of psychiatric admission: some preliminary findings. *J Nerv Mental Dis* 1999; 187:250-253.
- 28 Salib E, Ahmex AG, Cope M. Practice of seclusion: a five-year retrospective review in North Cheshire. *Med Sci Law* 1998; 38:321-327.
- 29 Greenwood N, Key A, Burns T, Bristow M, Sedgwick P. Satisfaction with inpatient psychiatric services: relationship to patient and treatment factors. *Br J Psychiatry* 1999; 3:159-163.
- 30 Henderson C, Phelan M, Loftus L, DallAgnola R, Ruggeri M. Comparison of patient satisfaction with community-based vs. hospital psychiatric services. *Acta Psychiatr Scand* 1999; 3:188-195.
 This well controlled study compared two routine services (rather than experimental services), one hospital based and one community based, and found that patients with psychosis were significantly more satisfied with community-based services.
- 31 Perreault M, Paquin G, Kennedy S, Sesmarais J, Tardif H. Patients perspective on their relatives' involvement in treatment during a short-term psychiatric hospitalisation. *Soc Psychiatry Psychiatr Epidemiol* 1999; 3:157-165.
- 32 Kaspro WJ, Frisman L, Rosenheck RA. Homeless veterans satisfaction with residential treatment. *Psychiatr Serv* 1999; 4:540-545.
- 33 Ito H, Shingai N, Yamazumi S, Sawa Y, Iwasaki S. Characteristics of nonresponders to a patient satisfaction survey at discharge from psychiatric hospitals. *Psychiatr Serv* 1999; 3:410-412.
- 34 Hoff RA, Rosenheck RA, Meterko M, Wilson NJ. Mental illness as a predictor of satisfaction with inpatient care at Veteran Affairs hospitals. *Psychiatr Serv* 1999; 5:680-685.
- 35 Bystritsky A, Saxena S, Maidment K, Vapnik T, Tarlow G, Rosen R. Quality of life changes among patients with obsessive-compulsive disorders in a partial hospitalisation program. *Psychiatr Serv* 1999; 3:412-414.
- 36 Hawthorne WB, Green R, Lohr JB, Hough R, Smith PG. Comparison of outcomes of acute care in short-term residential treatment and psychiatric hospital settings. *Psychiatr Serv* 1999; 3:401-406.
 This is a naturalistic, prospective study that compared outcomes of a large group of patients ($n=554$) at admission, discharge and follow up in residential and psychiatric hospital facilities. Comparable clinical improvement and satisfaction, but lower treatment costs in the residential setting were found.
- 37 Spießl H, Krischker S, Cording C. Aggressive behaviour in a psychiatric hospital [in German]. *Psychiatr Prax* 1998; 25:227-230.
- 38 Persad E, Kazarian SS. Physician satisfaction with review boards: the provincial psychiatric hospital perspective. *Can J Psychiatry* 1998; 43:905-909.
- 39 O'Reilly RL, Komer W, Dunbar S. Why are patients discharged by review boards? *Can J Psychiatry* 1999; 44:259-263.
- 40 Moebius RE, Jones BB, Liberman RP. Improving pharmacotherapy in a psychiatric hospital. *Psychiatr Serv* 1999; 3:335-338.
- 41 Langenbach M, Junaid O, Hodgson-Nwaefulu CM, Kennedy J, Moorhead SR, Ruiz P. Observation levels in acute psychiatric admissions. *Eur Arch Psychiatry Clin Neurosci* 1999; 1:28-33.
- 42 Varner R, Hollister L. A survey of hospital practices related to pelvic and rectal examinations of psychiatric inpatients. *Psychiatr Serv* 1999; 6:825-827.
- 43 Milgrom J, Burrows GD, Snellen M, Stamboulakis W, Burrows K. Psychiatric illness in women: a review of the function of a specialist mother-baby unit. *Aust N Z J Psychiatry* 1998; 5:680-686.
- 44 Tidmarsh D. Asylums or crude cauldrons of containment? The future of the special hospitals. *J Forens Psychiatry* 1998; 3:505-508.
- 45 Lipsitt DR. General hospital psychiatry in the 21st century: will old acquaintance be forgot? *Gen Hosp Psychiatry* 1999; 1:1-2.
- 46 Ito H, Kishi Y, Kurosawa H. A preliminary study of staff perception of psychiatric services in general hospitals. *Gen Hosp Psychiatry* 1992; 1:57-61.
- 47 Schreter RK. Reorganizing departments of psychiatry, hospitals, and medical centres for the 21st century. *Psychiatr Serv* 1998; 11:1429-1433.
- 48 Smith C, Pristach CA, Cartagena M. Obligatory cessation of smoking by psychiatric inpatients. *Psychiatr Serv* 1999; 1:91-94.
 This novel study assessed patients admitted to hospital where there was a smoking ban and reported that abrupt cessation of smoking did not significantly affect severity or amelioration of symptoms during hospitalization.
- 49 Semke J. Shifts in case mix and locus of mental health care for Washington State adults with severe mental illness. *Admin Policy Mental Health* 1999; 3:191-205.
- 50 Yurkovich E, Smyer T, Dean L. Maintaining health: proactive client oriented community day treatment centres for the chronic mentally ill. *J Psychiatr Mental Health Nurs* 1999; 1:61-69.
- 51 Silverstein SM, Schenkel S, Valone C, Nuernberger SW. Cognitive deficits and psychiatric rehabilitation outcomes in schizophrenia. *Psychiatr Q* 1998; 69:169-191.
- 52 Bellack A, Gold JM, Buchanan W. Cognitive rehabilitation for schizophrenia: problems, prospects, and strategies. *Schizophr Bull* 1999; 25:257-274.
 This theoretical and review paper provides an excellent overview of the 'state of the art' in cognitive rehabilitation for schizophrenia.
- 53 Wykes T, Parr A, Landau S. Group treatment of auditory hallucinations. *Br J Psychiatry* 1999; 175:180-185.
 A preliminary report is presented that describes the effectiveness of group treatment for auditory hallucinations. Significant changes were effected in distress, symptom severity and insight that were maintained at 3-month follow up.
- 54 Corrigan PW. Building teams and programs for effective rehabilitation. *Psychiatr Q* 1998; 3:193-209.
- 55 Corrigan PW, McCracken SG. Training teams to deliver better psychiatric rehabilitation programs. *Psychiatr Serv* 1999; 1:43-45.
- 56 Anthony WA. Psychiatric rehabilitation technology: operationalising the 'black box' of the psychiatric rehabilitation process. *New Dir Mental Health Serv* 1998; 79:79-87.
- 57 Lamberti JS, Melburg V, Madi N. Intensive psychiatric rehabilitation treatment. *Psychiatr Q* 1998; 3:211-234.
- 58 Solomon P, Draine J. Consumers as providers in psychiatric rehabilitation. *New Dir Mental Health Serv* 1998; 79:65-77.
 This paper addresses the lack of guidelines for service planners who wish to employ 'prosumers' (providers and consumers), makes concrete suggestions to facilitate organizational cultural change and addresses important issues such as personal/professional boundaries for consumer providers.
- 59 Drake RE, McHugo GJ, Bebout RR, Becker DR, Harris M, Bond GR, Quimby E.
 •• A randomised clinical trial of supported employment for inner-city patients with severe mental disorders. *Arch Gen Psychiatry* 1999; 56:627-633.
 This is a methodologically rigorous trial of a new approach to vocational rehabilitation (individual placement and support) that led to increased rates of competitive employment over traditional vocational rehabilitation services.
- 60 Priebe S. Which are the aims of psychiatric rehabilitation and which are achieved? [in German]. *Psychiatr Prax* 1999; 26(Suppl 1):S36-S40.