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# User perspective on needs and satisfaction with mental health services

PRiSM Psychosis Study 8

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**Background** Measurement of the impact of different types of service provision on the views of service users is important in planning mental health services.

**Method** Needs (met and unmet) and satisfaction with services, were assessed. People with psychosis (n=131) were interviewed before (Time I) and after (Time 2) the introduction of two community mental health services in south London. One was intensive, with two specialist teams, the other standard. Outcomes were compared at Time 2, controlling for the Time I values.

**Results** Overall, 70% of needs were met and mean satisfaction was between 'mixed' and 'mainly satisfied'. There was evidence for higher met needs in the intensive sector, but no evidence for lower unmet needs in the intensive sector or for differences in satisfaction. The additional needs met by the intensive service were associated with aspects of basic living situation. Satisfaction was negatively correlated with both unmet and met needs.

**Conclusions** Both services were reasonably successful, with little difference from the user perspective. The intensive service provided benefits in terms of met needs, but this has to be balanced against a possible increase in unmet needs.

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Increasing importance is being given to the views of mental health service users about their care. For example, guidelines for needs assessment under the National Health Service (NHS) and Community Care Act 1990 state that "all users should be encouraged to participate to the limit of their capacity. . . . Where it is impossible to reconcile different perceptions, these differences should be acknowledged and recorded". Furthermore, "so long as they are competent, the user's views should carry the most weight" (Department of Health Social Services Inspectorate, 1991, pp. 51, 53). This emphasis indicates the need to measure the views of the users, and well-validated measures have been developed to assess users' perspectives on (among other things) levels of need, satisfaction with services, social network and quality of life (reviewed in Thornicroft & Tansella, 1996). Of relevance to the present paper are need and satisfaction.

# MEASURING NEED AND SATISFACTION OF USERS OF MENTAL HEALTH SERVICES

Various definitions of need have been suggested, which can be categorised into needs for improved health, needs for services, and needs for action by mental health staff (Brewin, 1992). The NHS and Community Care Act 1990 suggests that needs are "the requirements of individuals to enable them to achieve, maintain or restore an acceptable level of social independence or quality of life" (Department of Health Social Services Inspectorate, 1991, p. 10), which defines need as relating to improved health and social functioning. In this definition two types of need can be present: met needs (difficulties which are ameliorated through help received) and unmet needs (where a serious problem currently exists, whether or not any help is being given). Different perspectives exist

on need (Slade, 1994). In particular, staff assessments of need can and do differ from users' assessments (Carter et al, 1996; Slade et al, 1996). Thus, although this paper is concerned with the perspective of users, in the wider context staff views also provide an important perspective.

Satisfaction with services, in contrast to needs, relates to the user's views about the care they receive from services. It can be regarded as both an outcome in its own right and as an intervening variable influencing other outcomes (Ruggeri, 1996). As an outcome variable in its own right it reflects both characteristics of the user (expectations, attributional style, self-esteem, illness, previous experience with services, etc.) and attributes of the service (structure, process, goals, etc.). Since one goal of any health service is that people using it are satisfied with the service they receive. satisfaction should be considered as a significant outcome variable in its own right (Williams & Wilkinson, 1995). However, it can also influence other outcomes of interventions (Priebe & Gruyters, 1995), particularly through its influence on treatment adherence and health-seeking behav-

The past two decades have also seen the development of new approaches to providing mental health care, for example in assertive outreach, crisis care, sectorised services, and improving the primary-secondary care interface. These approaches are based on a common aim of shifting the centre of gravity of care, with a primary goal of supporting the user in remaining out of hospital and maximising their ability to function effectively in the community, a goal which is intended to fit in with users' own wishes and priorities. This approach can be contrasted with traditional mental health services, which have a hospital-based centre of gravity of care, and have as a central goal the mitigation of symptoms, with stabilisation often achieved through in-patient admissions. These two approaches will be called 'intensive' and 'standard' models of care, respectively.

It would be expected that the impact on satisfaction with services and on met and unmet needs, would be different for intensive and standard care. Greater satisfaction with community treatment has been one of the main positive findings from studies comparing community-based treatment with more traditional services (Hoult et al, 1984; Goldberg, 1994; Marks et al, 1994) and therefore this may be an

outcome which will also be better for intensive than standard care. Intensive care should be more effective in meeting needs (by drawing on a wider range of interventions and community resources than standard care). For unmet needs there may be two influences: intensive care should involve the assessment of a wider range of needs than hospital care (leading to more unmet needs being identified), with more of these identified needs being met (leading to fewer needs being unmet). The direction of effect is thus unclear but one might expect an overall net decrease in the number of unmet needs in the intensive sector along with a corresponding increase in met needs.

This paper compares the impact of standard and intensive care on the users' assessments of their needs (met and unmet) and their satisfaction with services. The specific hypotheses tested are that (a) intensive care is associated with a decrease in the total number of unmet needs and an increase in the total number of met needs, and (b) intensive care is associated with an increase in satisfaction with services.

### **METHOD**

# The PRiSM Psychosis Study

The PRiSM Psychosis Study, described in more detail by Thornicroft et al (1998, paper 1 in this series), is a comparison of the effect of different types of service provision on people with psychotic illnesses in two adjoining and socio-demographically similar sectors in south London. In one of them (Nunhead) an intensive community-based service was introduced, whereas in the other (Norwood) the standard service continued. The two service types are described by Becker et al (1998, paper 2 in this series). Prior to the two-year study period, during which the intensive service was established, people with evidence of psychotic illness at any time in their lives were identified by a number of different methods, including contacting general practitioners and consulting case notes as well as by identifying current users of mental health services. From this epidemiologically representative population of 566, a random sample of 320 was chosen for interview. Eighteen individuals for whom no definite psychotic diagnosis could be established using research criteria were omitted from the analysis of this sample, which was intended to be interviewed at two time points: Time 1, when the services were similar, and two years later (Time 2), when it was anticipated that the impact of different services would be evident.

### Instruments: CAN and VSSS

The assessment of need was made using the Camberwell Assessment of Need (CAN), which has been shown to be reliable and valid (Phelan et al, 1995). The scale comprises 22 individual domains of need (accommodation, food, daytime activities, physical health, psychotic symptoms, psychological distress, safety to self, safety to others, alcohol, drugs, company, intimate relationships, sexual expression, looking after the home, self-care, child care, education, money, information, telephone, transport, benefits). In general there is good agreement between staff and user ratings of the overall numbers of needs, although there are substantial differences in individual items: for example, at both time points staff tend to rate lower percentages of needs in the areas of information and transport compared with users (see Slade et al (1996) for further discussion of staff-user agreement). This paper concentrates on the user perspective, the two main CAN outcomes being the (user-rated) total number of met and total number of unmet needs, aggregated from the 22 domains.

Satisfaction was assessed on the Verona Service Satisfaction Scale (VSSS), which comprises seven domains (satisfaction with: specific interventions, staff skill and behaviour, information, access to services, efficacy, relative support, and global opinion) based on 54 items, each of which is scored by the user on a five-point Likert scale from 'terrible' to 'excellent' (Ruggeri & Dall'Agnola, 1993). The reliability of the VSSS has been tested in the original Italian version; for the English translation internal consistency, as reflected in alpha coefficients, has been shown to be similar to that obtained for the Italian version (Parkman et al, 1997). The main outcome in this paper is the average of the seven domains. For any individual, average satisfaction was computed from whichever responses were available (occasionally responses were missing for individual domains, for example for 'relative support' in cases where there were no relatives; sample sizes for individual domains thus differ slightly from that for the average satisfaction score).

# Data analysis

The results are first presented as changes which took place over time in each sector. These change scores are of interest in themselves, but are affected both by the service type (intensive or standard) and the initial differences in values observed in the two sectors. The relative effect of the two types of service (for a particular outcome) is therefore estimated as the mean difference between sectors at Time 2, controlling for the Time 1 value. This is obtained from an analysis of covariance, in which the Time 1 value is included as a covariate, along with certain other (non-service-related) characteristics at Time 1. The rationale for analysis of covariance rather than a change score approach for testing hypotheses about relative effect is discussed by Plewis (1986).

Summary measures and the results of analyses of covariance are presented for those individuals with data at both time points (the 'complete pairs' sample). However, some individuals responded at only one of the time points and the larger sample, including all available data, was used to check the significance of differences in change scores between sectors, using an unbalanced repeated measures analysis. This larger sample is very similar in average characteristics to the complete pairs sample, for whom the summary measures are presented; the few differences are described below. In order to ensure that conclusions were not influenced by the exclusion of cases with missing values for other covariates, the analysis of covariance was repeated using list-wise deletion of missing values. Multiple testing was taken into account in subsidiary analyses of individual domains (Simes, 1986) but the three main outcomes are treated independently. Fisher's exact test was used for comparison of proportions. The analyses were performed using SPSS version 7.5 and BMDP version 7.0.

# The sample

The sample with complete VSSS data (131, 46% of those randomly selected for interview) is described in Table 1. The sample of those with complete CAN data (125, 44%) is very similar. The characteristics of the complete identified population with psychotic illness (514) and of the responders and non-responders is described by Thornicroft *et al* (1998, paper 1 in this series). Those selected for interview and alive at the

Table I Patient sample

Characteristic	Present
Sector (n (%))	
Nunhead	62 (47)
Norwood	69 (53)
Gender (n male) (%)	67 (51)
Marital status (n married or	23 (18)
cohabiting) (%)	
Ethnic group <sup>2</sup> (n (%))	
White	84 (64)
Black Caribbean	37 (28)
Black African	6 (5)
Other	4 (3)
Diagnosis³ (n (%))	
Functional non-affective psychosis	89 (68)
Affective psychosis	22 (17)
Other	20 (15)
Age (mean years (s.d.))	41.3 (14.8)
Service contact (mean years (s.d.))	17.0 (13.0)
GAF score (mean (s.d.))	58.5 (14.5)
BPRS total score (mean (s.d.))	34.5 (10.6)
CAN met needs total; max. 22	4.3 (2.3)
(mean (s.d.))	
CAN unmet needs total; max. 22	1.5 (1.8)
(mean (s.d.))	
VSSS score average; range I-5	3.59 (0.6)
(mean (s.d.))	

GAF, Global Assessment of Functioning; BPRS, Brief Psychiatric Rating Scale; CAN, Camberwell Assessment of Need; VSSS, Verona Service Satisfaction Scale.

- 1. Sample sizes where less than 131: service contact (127); GAF (112); BPRS (118); CAN (120).
- 12% of Whites born abroad; 45% of Black Caribbeans born abroad; 72% of Black Africans born abroad (percentages of cases where information available).
- Based on SCAN at interview where available; otherwise OPCRITat case identification.

end of the study period are described by Johnson et al (1998, paper 3 in this series). Of the 302 selected for interview and meeting inclusion criteria, 176 (55%) completed the CAN at Time 1 and 157 (55%) at Time 2. For the VSSS, the response rates were 194 (61%) and 154 (54%) at Times 1 and 2, respectively.

Those who were selected for interview but who did not respond at either time point were on average slightly older (44 years), with higher severe behaviour score (1.9), more likely to be women (59%) and married (27%). Those who responded at Time 1 but not at Time 2 had, on average, higher met needs (5.3) and unmet needs (1.8), and lower satisfaction (3.3) than the complete pairs sample; those responding at Time 2 only had slightly higher levels of met needs (4.0) and unmet needs (2.2) but similar satisfaction (3.6).

## **RESULTS**

# Changes over time

The means for the need and satisfaction measures at both time points and the changes over time in each sector are shown in Table 2. In Nunhead both met and unmet needs increased, and there was a slight increase over time in the mean total satisfaction score. In Norwood the number of met needs decreased, there was a slight increase in the number of unmet needs and there was little change in satisfaction. In terms of the proportion of total needs that were met, at Time 1 these were 77% and 74% for Nunhead and Norwood, respec-

tively; at Time 2 the percentages were 70% and 67%. The mean satisfaction levels were between 3 ('mixed') and 4 ('mostly satisfied') in both sectors at both time points.

There was no evidence for significant differences between the sectors at Time 1 at P=0.05, although satisfaction and both needs measures were slightly higher in Norwood than Nunhead at Time 1. An unbalanced repeated measures analysis on all the data (i.e. including those with values at either Time 1, Time 2 or both, and allowing for different variances at the two time points) showed an increase over time (both sectors combined) for unmet need at P=0.005, and a significant time × sector interaction for met needs (P=0.02) but not for unmet needs or satisfaction. This is a reflection of the different directions of the changes in met needs over time in the two sectors (increase in Nunhead and decrease in Norwood).

# Comparison between the intensive and standard services

The results of the analysis of covariance are given in Table 3 for the three main outcomes, with the appropriate Time 1 value included as a covariate The analyses were fitted both with and without adjusting for the following additional Time 1 characteristics: gender, marital status, age, ethnic group (White  $\nu$ . non-White), Severe Behaviour Schedule score (Ventura et al, 1993a,b), Global Assessment of Functioning score (Endicott et al, 1976) and number of years in contact with services. There was little difference in the results from these two

Table 2 Needs and satisfaction: changes from Time I to Time 2 in each sector

	Time I mean	Time 2 mean	Change (Time 2–Time I)	95% CI	P <sup>3</sup>
Nunhead <sup>1</sup>					
CAN met needs (% of total needs)	4.05 (77%)	4.45 (70%)	0.40	-0.31 to 1.10	0.26
CAN unmet needs	1.23	1.90	0.68	0.20 to 1.15	0.006
VSSS average satisfaction	3.53	3.61	0.07	-0.07 to $0.21$	0.30
Norwood <sup>2</sup>					
CAN met needs (% of total needs)	4.51 (74%)	3.73 (67%)	<b>-0.78</b>	-0.17 to $-1.39$	0.01
CAN unmet needs	1.57	1.86	0.29	-0.25 to $0.83$	0.29
VSSS average satisfaction	3.63	3.60	-0.03	-0.15 to 0.10	0.74

CAN, Camberwell Assessment of Need; VSSS, Verona Service Satisfaction Scale.

- I. n=62 Time I-Time 2 pairs.
- 2. n=63 (CAN) 69 (VSSS) Time I-Time 2 pairs.
- 3. Paired t-test; see text for significance of overall sector, time and sector × time effects based on unbalanced repeated measures.

Table 3 Estimated effect of the intensive service, adjusting for initial level

	n	R <sup>2</sup>	Adjusted mean difference <sup>l</sup>	95% CI	Effect size <sup>2</sup>	P
CAN						
Met needs	98	0.24	0.955	-0.016 to 1.93	0.41	0.05
Unmet needs	98	0.19	0.488	-0.241 to 1.22	0.27	0.19
VSSS						
average score	101	0.41	0.065	-0.123 to 0.252	0.12	0.50

CAN, Camberwell Assessment of Need; VSSS, Verona Service Satisfaction Scale

analyses, and results from the full model (including all these covariates) are presented.

The results show some evidence for a higher level of met needs in Nunhead than in Norwood at Time 2 for a given level at Time 1 (adjusted mean difference 0.955). Thus, individuals with similar Time 1 values would be expected to have, on average, about one extra met need in Nunhead than in Norwood after the introduction of the intensive service. In terms of standardised 'effect sizes' (Fletcher, 1995) this indicates a moderate effect. For unmet needs the intensive service is associated with an estimated mean difference of about one half, with Nunhead again higher than Norwood; however, the confidence interval is very wide and the difference is not significant at P=0.05. For VSSS there was no strong evidence of a service effect either way, since for given value at Time 1 the intensive and standard services resulted in similar mean levels at Time 2.

The relatively higher met needs in Nunhead compared to Norwood (for a given level at Time 1) was investigated by refitting the analysis of covariance with type of accommodation at Time 1 (supported, for example hostels, or unsupported, for example private owner-occupied or rented homes). The estimated difference between sectors was reduced and became non-significant (P>0.05).

Most of the other characteristics controlled for had little effect on the outcome at Time 2 or on the estimated service difference. One exception was length of service contact, which was associated with higher met needs, with an estimated mean increase of 0.6 for each 10 years' longer contact (95% CI 0.01-1.2, P=0.02). This did not appear to be confounded by the

effect of age. Length of service contact was also associated with greater satisfaction, with an estimated mean increase of 0.12 units of the VSSS scale per 10 years (95% CI 0.01–0.23, P=0.03). It is possible that the finding relating to satisfaction is partially confounded with age: if length of service contact is omitted from the model, a stronger association between age and satisfaction emerges (although it is not statistically significant at P=0.05). See also Parkman *et al* (1997) for a discussion of the association between age and satisfaction

# Correlation between needs and satisfaction

As expected, the total met needs at Time 2 was correlated with met needs at Time 1 (r=0.38), as was the total unmet needs at

Time 2 with unmet needs at Time 1 (r=0.39; P<0.001 in both cases). The association between met and unmet needs and satisfaction was also considered (using all the available data at each time point). At Time 1, satisfaction was not significantly associated with the number of met needs but was negatively associated with unmet needs (r=-0.26, P=0.001). At Time 2, satisfaction was negatively correlated with both met and unmet needs (r=-0.26, P=0.002, and r=-0.49, P<0.001, respectively). The associations between satisfaction and needs were similar in the two sectors.

#### Individual needs domains

The types of unmet needs affecting the largest proportions of individuals were similar at both time points and in both sectors. The needs domains affecting at least 15% of the sample at either Time 1 or Time 2 were those concerned with benefits, intimate relations, daytime activities, need for company and information about treatment. Considering the individual domains of need at Time 2, three differed at a conventional level of P=0.05: accommodation, food and psychotic symptoms. These differences, shown in Table 4, are not adjusted for Time 1 levels but are the observed levels of need of those people in each sector at Time 2 after the intervention. There was higher met need in the accommodation and food domains in Nunhead, but a higher percentage had no problem

 Table 4
 Specific needs at Time 2: food, accommodation and psychotic symptoms

	Nunhead (intensive)		Norwood (standard)		PI
	n	(%)	n	(%)	
Food				•	
No problem	43	(57)	57	(70)	< 0.01
Met need	31	(41)	17	(21)	
Unmet need	1	<b>(I)</b>	8	(10)	
Accommodation					
No problem	41	(55)	59	(72)	0.02
Met need	26	(35)	13	(16)	
Unmet need	8	(11)	10	(12)	
Psychotic symptoms					
No problem	17	(23)	15	(18)	0.05
Met need	56	(78)	58	(71)	
Unmet need	1	(1)	9	(11)	

<sup>1.</sup> Fisher's exact test. Simes' test: I significance only at P < 0.1 (not P = 0.05) for the set of 22 variables as a whole; these three items differed at a nominal level of P = 0.05 using all available data at Time 2.

Adjusted for Time I value and other Time I characteristics using analysis of covariance; intensive (Nunhead) compared to standard (Norwood).

<sup>2.</sup> Adjusted difference/(pooled s.d. at Time I).

Table 5 Individual Verona Service Satisfaction Scale domains

	Nunhead <sup>1</sup> (intensive)		Norwood <sup>2</sup> (standard)		Mean difference in change scores <sup>3</sup>	Analysis of covariance		
	Time I mean	Time 2 mean	Time I mean	Time 2 mean	•	Adjusted mean difference <sup>4</sup>	95% CI	P
Global satisfaction	3.67	3.74	3.86	3.67	0.25	0.12	-0.19 to 0.45	0.43
Staff skill and behaviour	3.60	3.83	4.01	4.00	0.25	0.10	-0.09 to $0.29$	0.29
Specific interventions	3.42	3.56	3.59	3.54	0.19	0.09	-0.05 to $0.23$	0.20
Information	3.25	3.39	3.34	3.33	0.15	0.10	-0.24 to $0.44$	0.56
Accessibility	3.46	3.72	3.51	3.65	0.31	0.24	-0.10 to $0.58$	0.16
Efficacy	3.46	3.53	3.58	3.65	0.00	-0.06	-0.34 to $0.23$	0.70
Relatives' support	3.35	3.37	3.69	3.57	0.14	-0.09	-0.58 to $0.41$	0.73

- 1. Sample sizes: global 52; staff skill 52; information 50; access 52; efficacy 51; interventions 62; relatives' support 30.
- 2. Sample sizes: global 61; staff skill 59; information 59; access 56; efficacy 59; interventions 8; relatives' support 26.
- 3. Intensive (Nunhead)-standard (Norwood).
- 4. Difference at Time 2, controlling for the value at Time I: intensive (Nunhead)-standard (Norwood).

in Norwood and there was a higher percentage with unmet needs in the psychotic symptoms domain in Norwood. Taking account of multiple testing, however, there was no evidence for an overall difference at Time 2, and the significance levels for individual items should be treated with caution.

## Individual satisfaction domains

Particular aspects of satisfaction with services were also investigated in more detail and are shown in Table 5. Nunhead showed greater increases in satisfaction with staff skill and behaviour, specific interventions and access, as well as the average score already discussed and shown in Table 1, whereas Norwood remained stable on all domains. Analysis of covariance of the data on these individual domains shows that most of the adjusted differences were still in favour of Nunhead, except for efficacy and support for relatives where they were higher in Norwood, although no sector differences were significant at P=0.05.

# **DISCUSSION**

# Limitations of the study

The limitations of the study include the relatively large baseline differences and the possible dilution of the intervention, for example by unforeseen changes in service provision over the study period, or users not responding, being continuously out of contact with services or having moved. These are discussed more fully in Becker

et al (1998, paper 2 in this series) and Johnson et al (1998, paper 3 in this series). The fairly low response rate is also a problem, in that the power for detecting subtle differences is reduced, and the relatively low satisfaction of those who did respond to the VSSS interview at Time 1 but not at Time 2 is also a cause for concern since they may have been people whose views would have been of particular interest.

Despite the interrelationships found between need and satisfaction, the three outcome measures have been treated independently for the purposes of testing the hypothesis relating to sector differences, and this may be an oversimplification. Further work, including the development of more detailed structural models of the association between satisfaction and needs, would also be of interest and is currently being undertaken but was not within the scope of the present analysis. The finding that increased met needs did not accompany decreased unmet needs as expected is an area for investigation.

# Intensive service meeting more basic needs

On the basis of the complete Time 1-Time 2 data, there is evidence for higher met needs in Nunhead compared to Norwood, having controlled for the initial value. Accommodation provision seems to play some role in distinguishing the services in terms of needs. Including type of accommodation (at baseline) in the statistical model reduced the estimated difference in

met needs between the sectors, and users' perceptions of met needs in accommodation are higher in Nunhead than in Norwood at Time 2. However, McCrone et al (1998, paper 5 of this series) show that there was little change in the relative proportions in supported accommodation between the two sectors so these effects may be due in part to pre-existing service differences. The small increase in unmet needs is common to both sectors, and although there was a relative increase in Nunhead compared to Norwood, this was not statistically significant (P > 0.05). At Time 2 the sectors had almost identical levels of unmet need and of percentages of needs being met. The main difference between the sectors is thus in met needs, specifically basic needs such as accommodation and food.

There remains a question as to whether the relatively high level of met needs by the intensive service is necessarily a favourable outcome. The total number of needs increases in Nunhead, not because met needs replace unmet needs but because they add to them. This might be for several reasons. A higher level of total needs might reflect truly higher levels of disability. It might indicate a greater recognition of needs by users, for example due to raised awareness (leading to more met or unmet needs) or expectations (leading to more unmet needs). It might indicate that the service is undertaking more complete assessments, and thus uncovering hidden 'morbidity' of need.

Relevant to this question is the finding that user satisfaction and quality of life do not tend to increase with met needs, but decrease with decreasing unmet needs, as shown both in the present study and in another study of the association between needs and quality of life in this sample (unpublished data available from the authors upon request). These findings suggest that different factors impact on met and unmet need and that the level of unmet needs is more likely than the level of met needs to affect users' perceptions of their situation.

# Satisfaction: a stable phenomenon

Satisfaction was similar (and quite high) at the two time points, and between sectors, and appeared to be a stable phenomenon. A similar conclusion was found for quality of life measures (Taylor et al, 1998, paper 9 in this series). Satisfaction was more strongly associated with lower unmet needs than with higher met needs and so it is perhaps not surprising that the levels of satisfaction are similar in the two sectors at Time 2, given that their levels of unmet needs are very similar. The length of service contact had an impact on the users' assessments of both their satisfaction and their met needs, and this may be associated with greater service engagement (of whichever type).

There does seem to be a trend in levels of satisfaction which is favourable to Nunhead, albeit one which is small in magnitude and not statistically significant when adjusting for baseline differences. It may be that the more community-based service had a slightly more positive impact on satisfaction. However, the difference between the two services may not have been great enough to produce the more substantial effects seen in other studies.

# Satisfaction and needs of mental health service users in Nunhead and Norwood

In conclusion, the two services were both reasonably successful: average satisfaction was described as between 'mixed' and 'mostly satisfied' in both sectors, and over the two time periods the majority of needs were being met (about 70% on average). The significantly greater level of met needs in Nunhead, controlling for baseline differences, suggests that the intensive service provided some additional benefits, although it is not clear from these data alone why the extra needs being met should have arisen: an increased awareness by patients of their own needs is a possible

#### **CLINICAL IMPLICATIONS**

- Higher met needs, especially in the provision of basic services, characterise the intensive service.
- Unmet needs are likely to impact more strongly on satisfaction than met needs.
- The level of satisfaction is fairly high, and is similar with both types of service.

#### LIMITATIONS

- There were pre-existing differences between sectors which are difficult to take into account.
- The views of non-responders, and their reasons for non-response, may be important.
- The associations between met need, unmet need and satisfaction require further investigation.

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reason. The evidence is that the met needs are connected with basic living situation, since the differences established at the end of the intervention are reflected in the accommodation and food domains. In both sectors few patients had unmet basic needs. Apart from these differences, the two sectors appear fairly similar from the perspective of the users.

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