# Title

# MENTAL HEALTH SUPPORTED ACCOMMODATION SERVICES IN ENGLAND AND IN ITALY: A COMPARISON

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# Abstract

*Purpose* England and Italy are considered pioneers in the development of community mental health services. Both have implemented supported accommodation services for those with more complex needs, which can be broadly categorized into three main types with similar specification. The aim of this study was to compare the characteristics of these services and their users in England and Italy.

*Methods* Data from two cross-sectional surveys of supported accommodation services undertaken across England and in Verona, Italy (England - 619 service users from 87 services; Verona - 167 service users from 25 services) were compared.

*Results* Service users in the two samples had similar sociodemographic and clinical characteristics; most were male, unmarried and unemployed, with a primary diagnosis of schizophrenia or other psychosis and over 15 years contact with mental health services.

Supported accommodation occupancy was high in both samples. The actual length of stay was greater than the expected length of stay for all three service types but overall turnover was similar between countries (p=0.070). Across services, total needs and quality of life were higher for Italian compared to English service users (p<0.001 for both) but, unmet needs were lower amongst English service users (p<0.001). Around 40% in both samples moved to more independent accommodation successfully within 30 months. *Conclusions* England and Italy have similar mental health supported accommodation pathways to assist those with more complex needs to gain skills for community living, but

## **Keywords**

Supported accommodation; psychiatric rehabilitation; quality of life; met needs; deinstitutionalization

individuals tend to require longer than expected at each stage.

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Conflict of interest The authors declare that they have no competing interests.

## Background

The deinstitutionalization of mental health services has progressed at different rates worldwide [1]. Most countries in Europe now have specific mental health policies and legislation, and many are making progress towards the development of community based mental health services (CMHSs), but inadequate political support and investment mean that in many countries individuals with more severe mental health problems continue to live in some form of institution [2].

England and Italy can be considered pioneers of the deinstitutionalization process. Both have a similar size population (around 60 million) and benefit from a national health service with locality based authorities that plan and oversee health and social care. Both have undergone massive reductions in their inpatient bed base and developed comprehensive networks of community-based mental health and supported accommodation services [3]. In England, the Hospital Plan of 1962 marked the start of the process [4] and since then the number of long-stay beds has reduced from over 150,000 to around 18,000 (2016) [5]. Over time, the policy

has increasingly encouraged collaborative partnerships between health, social care and the voluntary sector to provide supported accommodation and vocational rehabilitation services including supported employment schemes [6-9]. Italy is celebrating the fortieth anniversary of the reformation of mental health services that followed the passing of Law 180 in 1978 (the 'Basaglia Law') which directed the closure of all psychiatric hospitals [10] and catalyzed their gradual replacement with a range of community-based services [11]. By 1998 all the large hospitals had closed and inpatient care is now provided in small, acute psychiatric wards within district general hospitals [12, 13]. In 2016, the total number of inpatient beds was around 4,000 [14].

In both countries, the group who need supported accommodation services tend to have severe and complex mental health problems (such as schizophrenia and other psychoses), with associated cognitive difficulties that impair their ability to manage activities of daily living [15]. They need assistance to learn or relearn how to manage medication, personal care, laundry, budgeting, shopping, cooking and cleaning [16]. Most are unemployed, socially isolated, and many do not participate in civil and political processes [17]. They may therefore also require encouragement and support to access community resources and to remain in touch with family and friends [18]. Consequently, mental health supported accommodation services are a crucial component in the rehabilitation of this group, aiming to assist service users to develop the practical living skills that will promote recovery, independence and social inclusion [19].

In both England and Italy, these supported accommodation services can be broadly categorized into three main types with a similar specification (summarised in Table 1) [16, 20]. In England, the first type is residential care (RC) which provides long term, 24 hours staffed, shared accommodation to individuals with the highest needs. Staff provides practical assistance including supervision of medication, meals, cleaning, and laundry. They also facilitate the group and individual activities and provide emotional support. Residents usually have their own bedroom and share a communal lounge, dining room and outside space. There is no maximum length of stay. In Verona, the most intensively supported accommodation service is the Psychiatric 'Comunità Terapeutico-Riabilitativa Protetta' (CTRP) or Sheltered Therapeutic Rehabilitation. The CTRPs comprise, according to the Italian national classification, the 'Struttura Psichiatrica Residenziale' (SRP) or Psychiatric Residential Service of type 1 (CTRP type A), and SRP type 2 (CTRP type B), depending on

the level of intensity of assistance (respectively high and intermediate). They are non-hospital therapeutic accommodations designed to meet the health and social welfare needs of service users requiring fixed-term therapeutic and rehabilitative assistance. They are located in large buildings in the city and provide from 8 to 14 places. The staff is available on-site for up to 24 hours per day. The expected length of stay is one to two years. The second service type is known in England as supported housing (SH) which comprises shared or individual tenancies (in either a house or apartment) with staff on-site between eight and 24 hours per day. These time-limited supported accommodation services aim to help service users develop their skills to manage in more independent accommodation within around two years. The equivalent supported accommodation services in Verona are 'Comunità Alloggio' or Community Sheltered Houses divided in 'Comunità Alloggio Estensiva' (CAE) or Extensive Community Sheltered Houses and 'Comunità Alloggio di Base' (CA) or Basic Community Sheltered Houses, referring respectively, according to the national plan, to SRP of type 3.1 for service users with higher needs, and SRP of type 3.2 for service users with lower needs. In the whole, the CAs provide psychiatric and social therapeutic care tailored to individual problems and needs of residents in order to underpin and develop their residual autonomy, offering a structured daily programme of activities, including leisure time activities, designed to help the person gain community living skills. This service usually serves between 6 and 12 residents living together with separate functional areas. This residential service is located in large buildings in the community. Staff is present 12 to 24 hours a day. The maximum length of stay is three years. The third service type is known in England as floating outreach (FO) which provides visiting support of a few hours per week to service users living in selfcontained, individual or shared, permanent tenancies with the aim of reducing the visits to zero over two years. The Italian equivalent is 'Gruppo Appartamenti Protetti' (GAP) or Home Groups (according to the national plan SRP 3.3), that provide care in the least restrictive environment and aim to integrate individuals with mental illness into the community, reducing stigma and improving quality of life. The environment of a group home was intended to simulate typical family life as much as possible. Thus, they are located within a community and serve no more than 4 service users. Residents are usually encouraged to take an active role in the maintenance of the household, such as performing chores or helping to manage a budget. Staff provides visiting support for four hours a day. The maximum length of stay is two years.

Whilst the specification of the three main models of service in the two countries are not exactly the same, in both they tend to operate as a 'care pathway', providing an appropriate level of support to individuals according to their specific needs, and, where possible, enabling them to move on to less supported or fully independent accommodation over time. This has the advantage of providing tailored support and clear goals for staff and service users to work towards, but the drawback is that individuals have to keep moving home as they progress in their recovery [21]. In 2016, in England, it is estimated that around 60,000 working-age adults with severe mental health problems are living in supported accommodation (roughly 100/100,000 inhabitants), costing around £150 per week for the lowest supported accommodation services (FO) to around £500 per week for the highest (RC) [22].

In Italy, the total number of service users resident in supported accommodation in the same years according to the Ministry of Health figures was just under 30,000 (50/100,000 inhabitants) with individual service costs similar to the UK [14]. The discrepancy in numbers between Italy and England may be due to more service users in Italy living with family [23].

## Table 1 about here

There have been no studies comparing mental health supported accommodation services in England and Italy. The authors aimed to compare the service characteristics and the sociodemographic, needs, and quality of life of the users of these supported accommodation services in England and Italy.

#### Methods

## Study design

The present study reports on data from two cross-sectional surveys of mental health supported accommodation services in England and in Verona, Italy (population around 257,353) [23, 25]. Data were collected between October 2013 and October 2014 in England and between January 2014 and June 2014 in Italy. The English sample comprised 619 service users from 87 supported accommodation services. The Italian sample comprised 167 service users from 25 supported accommodation services.

## Sample

The 87 English supported accommodation services were 22 RC, 35 SH and 30 FO, randomly sampled from 14 geographic areas across the country that were selected using an area ranking index that includes factors relevant to mental health supported accommodation (morbidity, social deprivation, urbanicity, provision of community mental health care, supported accommodation, Local Authority mental health care spending, and housing demand) [5, 26]. Between five and ten service users per service were randomly sampled for inclusion (159 [26%] from RC, 251 [40%] from SH and 209 [34%] from FO). The Italian sample comprised of 167 service users under the care of one of the four community mental health services of the Verona Mental Health Department (MHD) and who was living in any of the 30 local adult mental health supported accommodation services during the recruitment period. The cross-sectional survey aimed to take a picture of the Verona MHD residential services based on standard assessments, involved 25 out of 30 supported accommodations of the Verona MHD' catchment area (5 CTRPs, 12 CAs, and 8 GAP). Service users were identified through the MHD database and the South Verona Psychiatric Case Register [27]. The Italian sample comprised 45 (27%) service users living in CTRP, 108 (65%) in CA and 14 (8%) in GAP. For the current comparison, 24 service users were censored from the original dataset because they were residents at nursing homes (without a rehabilitation aim).

## Measures

In England, data were gathered as part of a national research programme into mental health supported accommodation (Quality and Effectiveness of Supported Tenancies for people with mental health problems: QuEST <u>http://www.ucl.ac.uk/quest</u>). The Italian data were gathered as part of a study of supported accommodation services in Verona (the VALERE-REC Study: eVALuation of outcomE in REsidential facilities-use of clinical data with REsearch objeCtives). Since the comparison of these supported accommodation services was not an *a priori* aim of either survey, the authors were limited to comparing data that were gathered in both. With regard to service characteristics, these were: expected length of stay; actual length of stay; mean total places; mean occupied places; mean new admissions in past 12 months; mean successful moves to more independent accommodation within 30 months. Service user characteristics comprised: socio-demographic variables (age, gender, marital status, employment status, previous accommodation); mental health problems and service use (primary diagnosis, problematic alcohol, and substance use, years of contact with mental health services, mean previous admissions, mean previous compulsory admissions); needs

(assessed in the English survey using the Camberwell Assessment of Needs Short Appraisal Scale [CANSAS] and, in the Italian survey, with the full version [CAN] (both comprise 22 items which assess the amount and type of help needed and received, denoted as total, met and unmet needs) [28]); and quality of life (assessed in both surveys by the Manchester Short Assessment of Quality of Life [MANSA], which provides the participant's subjective assessment of a number of life domains and produces a total mean score between 1 (completely dissatisfied) and 7 (completely satisfied)][29])

## Data gathering and ethics approval

In both countries, data were collected using face to face interviews with staff and service users and interviews took no more than 30 minutes. In England, service use was corroborated from case notes and in Italy, from the South Verona Psychiatric Case Register. Ethical approval for the English survey was gained from the Harrow Research Ethics Committee (reference 12/LO/2009) and in Italy, from the University Hospital Integrated Trust of Verona Research Ethics Committee (reference 34950, 13/11/2018).

## Data analysis

In both surveys, data were entered into a study-specific database by the researchers. The English data were transferred to Stata statistical software (version 12) for analysis and in the Italian sample, data were analyzed using SPSS (version 17.0) for Windows. For this study, descriptive statistics were examined for each variable to allow comparison between the three main service types in each country. Statistical testing was carried out using Stata (version 14) to compare the two samples (England versus Verona). T-tests were used for continuous variables, while chi-squared or Fisher's exact tests were used for categorical variables. All tests were bilateral with significance level 0.05.

## Results

## Supported accommodation service characteristics

Table 2 shows the main characteristics of the supported accommodation services. There were similar percentages of the three main types of supported accommodation in both the English and Italian samples. The actual length of stay was greater than the expected length of stay for all three service types. Occupancy of all supported accommodation services was high, and the English services had more occupied places overall than those in Verona (p <0.001). The

largest difference in service size was in Type 3 services; the mean number of service users supported by English FO services was 36, compared to a mean of 4 people supported by GAP services in Verona. The Italian Type 1 (CTRP) services had more new admissions than the English RC services, but the reverse was true for Type 2 and Type 3 services, such that, overall, there was no difference in turnover between the two countries (p=0.070).

## Table 2 about here

#### Service user characteristics

Table 2 shows the characteristics of supported accommodation service users in the two samples. In both countries, around two-thirds were male, and their mean age was similar. The majority had never been married or cohabited though this was more often so for those from Verona than England (p=0.020). Most were unemployed, though a higher percentage of Italian than English service users were engaged in some form of vocational rehabilitation programme or employment (p <0.001). The diagnostic breakdown was similar, with most service users having a primary diagnosis of schizophrenia, schizoaffective disorder or bipolar affective disorder but more of those living in Type 3 (FO) services in England had a diagnosis of a common mental disorder than in their Italian counterparts (p <0.001). More of the English service users had a co-existing problem with alcohol or substance misuse than those using Italian supported accommodation services (p-value<0.001 in both cases). Service users in both samples had been in contact with mental health services for many years (mean 15 years for the English sample, 18.7 years for the Italian sample, p=0.0615). Those living in Verona had many more previous admissions compared to the English service users (p<0.001) but a lower proportion of these were involuntary compared to the English service users who had had an admission (p=0.059). In both countries, admissions were less common amongst users of less supported accommodation types. The route into the current service differed between the two samples: around two-thirds of English service users had moved to their supported accommodation from independent or family accommodation whereas this was the case for just under a half of the Italian sample (p<0.001). Overall a similar percentage of service users in both countries moved successfully to more independent accommodation 30 months after the survey (41% English vs 38% Verona), though there were differences between service types in this (RC 10%, CTRP 51%; SH 39%, CA 39%; FO 67%, GAP 46%).

## Needs and quality of life

Table 3 shows ratings of service users' needs (CAN/CANSAS) and quality of life (MANSA). Amongst the users of supported accommodation services in England, total needs were highest for those living in Type 1 accommodation (RC) and similar for those in Type 2 (SH) and Type 3 (FO) services. In Verona, total needs were similar for users of all three types of service but, overall, total, met and unmet needs were higher than in the English sample (p<0.001 for all three). Quality of life was also higher amongst users of supported accommodation services (p<0.001).

## Table 3 about here

## Discussion

This study provides the first comparison of English and Italian supported accommodation services and their users.

Service user characteristics confirmed that supported accommodation services in England and Verona focus on people with longer term mental health problems. The fact that two-thirds of the service users were male, unemployed and never married concurs with previous studies and reflects the poorer prognosis for men with a diagnosis of schizophrenia, who tend to congregate in rehabilitation and supported accommodation services [15, 17, 30, 31]. The finding that hospital admissions were less frequent amongst users of less supported accommodation suggests that those with less acute or less severe mental health problems were living in less supported settings. This could reflect a successful clinical pathway, with service users moving from higher to less supported accommodation over time as their condition stabilizes. However, the differences in the diagnostic profile of the English sample calls this assumption into question since a larger percentage of individuals with more severe mental health problems were supported in Type 1 and Type 2 services whereas Type 3 services supported more individuals with non-psychotic disorders. Furthermore, two-thirds of the English sample and half of the Italian sample moved to their supported accommodation from independent or family accommodation, rather than from another supported accommodation service. However, not all users of Type 1 (RC/CTRP) services had moved there from the hospital, suggesting that patient flow along the pathway is not always

unidirectional (from higher to lower support). Nevertheless, services were taking in new admissions, suggesting that there was flow in the system.

In addition, almost half the users of both the English and Verona services moved on to more independent accommodation successfully over the 30 months. This suggests that, in both settings, a 'care pathway' was in operation where individuals graduate to more independent accommodation over time, as they gain skills and confidence [21].

The fact that the mean actual length of stay exceeded the expected length of stay across all supported accommodation services in both countries, suggests either a lack of appropriate places for people to move on to, or that the expected length of stay is too short and individuals simply need longer to gain the skills to enable them to progress to more independent settings. This discrepancy was particularly marked for Type 1 accommodation, possibly because this is the first step in the 'care pathway' and therefore service users have more functional impairments than those who have progressed further along the pathway. In England, patients with complex mental health problems who have not recovered adequately to be able to be discharged home from the acute admission ward are referred to inpatient rehabilitation services. Most are then discharged to supported accommodation services once stable. In Italy, there are no inpatient mental health rehabilitation units and CTRPs may, therefore, be performing the role of the English inpatient rehabilitation units. This possible explanation is supported by the fact that far more of those in the CTRP units in Verona moved on within 30 months (51%) compared to those in the English RC services (10%). In both samples, there was a high percentage of service users with a diagnosis of severe psychotic illness and very long histories of contact with mental health services. It is therefore unsurprising that these service users may require longer than the expected length of stay to achieve the levels of functioning required to safely move on to more independent accommodation. This might also explain the longer than expected length of stay in Type 2 and Type 3 accommodation; if an individual has not had adequate time in more highly supported accommodation they may continue to struggle to move on in a timely fashion after moving to less supported accommodation. A further possible explanation is that there may be resistance from staff, service users or their family members for the person to move on due to reasons such as fear of destabilization, not wanting to move away from community

resources that the person has engaged with, or differing opinions about the level of support needed at the next stage of the pathway [32, 33].

The higher use of inpatient care amongst the Italian service users probably reflects differences in the mental health systems of the two countries, with Italy having very low numbers of acute inpatient beds and low use of involuntary admissions and, consequently, shorter but more frequent admissions than England [14, 34]. Furthermore, the English mental health system provides home-based mental health crisis care as an alternative to admission, which could explain the higher rates of involuntary admission since individuals perhaps have to be more unwell to be admitted and are therefore more likely to be admitted involuntarily than in Italy.

The differences the authors found between the two countries in the percentages of service users with alcohol or illicit substance use concur with other national surveys that have found these problems to be more common in England than in Italy [35-38]. Furthermore, in Italy, the health system provides specialist supported accommodation for people with co-occurring mental health and substance misuse problems who are therefore diverted away from the 'generic' supported accommodation pathway.

Italian users of all three service types had more needs than their English counterparts. This finding could be due to differences in the way needs were assessed, with the full Camberwell Assessment of Needs being used in the Italian sample and the brief version in the English sample. However, most service users' needs in the English sample were met whereas this was not the case in the Italian sample and in the most supported Italian accommodation services (CTRP), most needs were unmet. This might suggest that these supported accommodation services are indeed accepting people who are more unwell than the English equivalent services (RC), as suggested earlier, and that the CTRPs perform a role somewhere between the English RCs and inpatient mental health rehabilitation units. This explanation seems likely since most unmet needs in the Verona service users were in the domains of 'health' and 'functioning'(CAN [28]). Despite this, quality of life was higher amongst the Italian service users in all three types of accommodation. In the QuEST study, after adjusting for clinical differences, users of the more highly supported settings (RC and SH) had a higher quality of life than users of FO, possibly due to a greater exposure to crime (theft) and exploitation found for those living more independently [33]. The protective environment of having staff

on-site may, therefore, ensure a level of safety that impacts positively on the quality of life. In the Italian sample, the authors found that 3% reported having been a victim of crime (e.g. theft, violence or exploitation – MANSA [29] item  $n^{\circ}11$ ) within the last 12 months compared to 19% of the English service users. This could also be related to the differences in substance misuse the authors found.

## Strengths and limitations

The main limitation of the study was that the authors were limited to comparing data gathered in both surveys. However, both had similar aims (to provide detailed descriptions of supported accommodation services and their users) and were conducted at similar times with similar approaches to data collection. There were also similar percentages of the three types of supported accommodation in both samples. Small samples sizes did not allow comparison at the individual service type level between the two countries but both samples were nationally representative. The English sample was from a representative national survey and the Italian sample was drawn from an area (the Verona mental health department population) which has previously been shown to be comparable to the Italian mental health population [14, 39]. There were also important differences in the two systems that need to be taken into account; specifically, the Italian CTRPs seem to perform a role that is somewhere between the English RC and inpatient rehabilitation units and the English FO services provide less support than Italian GAPs. A further limitation is that the cross-sectional design prevents the identification of causal associations in our data.

## Conclusions

England and Italy, pioneering countries in the process of deinstitutionalization of mental health services, have developed similar supported accommodation pathways for those with longer term and more complex needs. Both aim to support individuals to graduate from higher to lower support over time as they recover skills for more independent living, but this pathway is not unidirectional, and individuals tend to require longer than expected at each stage. English supported accommodation services were generally meeting service users' needs more than Italian supported accommodation services, but the latter had a greater quality of life, possibly due to greater staff presence that mitigated the chance of being a victim of crime. Further research, is needed to investigate the quality and outcomes of these supported accommodation services in order to inform best practice.

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	England	Verona, Italy
Type 1	Residential Care	<b>Comunità Terapeutico-Riabilitative Protette</b> Staffed 24 hours a day. Active rehabilitation.
	Staffed 24 hours a day.	High-intensity support, expected maximum
	Patients with high support needs. Some	stay 1 year
	active rehabilitation but no maximum length	Intermediate intensity support, expected
	of stay.	maximum stay 2 years
Type 2	Supported Housing	Comunità Alloggio
	Staff on-site up to 24 hours per day	Staff on site 12-24 hours a day
	Support to increase independence and	Structured day programme
	promote move-on	Expected maximum stay 3 years
	Expected maximum length of stay 2 years	
Type 3	Floating Outreach	Gruppo Appartamenti Protetti
	Visiting support (2-4 hours per week) to	Visiting support 4 hours a day to 3-4 service
	service users living in their own, permanent	users sharing apartment. Residents share
	tenancy	household chores.
	Aim to reduce the support to zero over	Expected maximum stay 2 years
	around 2 years	

	Type 1		Type 2		Type 3		Total		
Number of supported accommodation services surveyed (% per country total)	RC 22 (25%)	CTRP 5 (20%)	SH 35 (40%)	CA 12 (48%)	FO 30 (35%)	GAP 8 (32%)	England 87 (100%)	Verona, Italy 25 (100%)	p-value
Number of service users interviewed	159 (26%)	45 (27%)	251 (40%)	108 (65%)	209 (34%)	14 (8%)	619 (100%)	167 (100%)	
Expected length of stay (years) N	5	2	2	2	2	3	2-5	2-3	
Actual mean (SD)years in the current accommodation (years)	13.8 (22.2)	4.8 (3.1)	3.4 (4.0)	5.8 (3.5)	2.5 (2.2)	3.6 (2.3)	5.6 (11.8)	4.6 (3.1)	0.060
Mean (SD) places	18.1 (7.6) (22 RC)	14.7 (3.8) (3 CTRP)	12.5 (6.0) (35 SH)	15.1 (6.5) (8 CA)	36.3 (29.5) (29 FO)	3.6 (0.5) (5 GAP)	22 (20.6) (86 RFs)	11.4 (7.2) (16 RFs)	<0.001*
Mean (SD) occupied places	14.7 (7.5) (22 RC)	14.7 (3.8) (3 CTRP)	12.0 (5.8) (35 SH)	12.3 (4.3) (8 CA)	35.8 (29.7) (30 FO)	3.6 (0.5) (5 GAP)	20.9 (21.1) (87 RFs)	10 (5.6) (16 RFs)	<0.001*
Mean (SD) new service users in the past 12 months	3.6 (4.3) (22 RC)	9.3 (4.98) (3 CTRP)	4.5 (7.4) (35 SH)	1.4 (1.1) (8 CA)	22.7 (63.7) (29 FO)	0.8 (0.97) (5 GAP)	10.4 (37.9) (86 RFs)	2.69 (3.98) (16 RFs)	0.070
Service users' mean (SD) age in years	55.0 (12.5)	46.5 (11.7)	40.6 (12.3)	50.1 (11.5)	45.7 (12.2)	39.2 (8.8)	46.0 (13.5)	48.2 (11.8)	0.056
<i>Gender</i> Number (%) male service users	109 (69%)	25 (56%)	167 (67%)	67 (62%)	134 (64%)	10 (71%)	410 (66%)	102 (61%)	0.214

Table 2. Characteristics of English and Italian Verona supported accommodation services and service users.

<i>Marital status</i> Never married or cohabitated/Single Currently married/In partnership Separated/widowed/divo rced	97 (61%) 7 (4%) 53 (34%)	42 (94%) 1 (2%) 2 (4%)	195 (78%) 13 (5%) 41 (17%)	90 (83%) 4 (4%) 14 (13%)	114 (55%) 24 (11%) 71 (34%)	14 (100%) 0 (0%) 0 (0%)	406 (66%) 44 (7%) 65 (27%)	145 (87%) 5 (3%) 16 (10%)	0.020*
<i>Working status</i> Employed Unemployed or retired Other (e.g. training, educational, voluntary work, etc.)	2 (1%) 157 (99%) 0 (0%)	4 (9%) 35 (78%) 6 (13%)	7 (3%) 239 (95%) 5 (2%)	5 (5%) 89 (83%) 14 (12%)	7 (3%) 184 (88%) 18 (9%)	3 (21%) 11 (79%) 0 (0%)	16 (3%) 580 (94%) 23 (3%)	12 (7%) 124 (74%) 20 (19%)	<0.001*
Diagnosis of psychotic illness	130 (83%)	34 (76%)	181 (73%)	71 (66%)	109 (53%)	11 (79%)	420 (69%)	116 (69%)	0.692
Primary diagnosis Schizophrenia Schizoaffective disorder Bipolar affective disorder Depression and anxiety Other	102 (65%) 11 (7%) 17 (11%) 16 (10%) 12 (8%)	23 (51%) 9 (20%) 4 (9%) 1 (2%) 8 (18%)	140 (56%) 31 (12%) 10 (4%) 39 (16%) 31 (13%)	48 (45%) 9 (8%) 10 (9%) 9 (8%) 32 (30%)	82 (39%) 15 (7%) 12 (6%) 75 (36%) 24 (11%)	9 (64%) 1 (7%) 1 (7%) 0 (0%) 3 (22%)	324 (53%) 57 (9%) 39 (6%) 130 (21%) 69 (11%)	80 (48%) 19 (11%) 15 (9%) 10 (6%) 43 (26%)	<0.001*
Problematic alcohol use	19 (12%)	2 (4%)	44 (18%)	5 (5%)	33 (16%)	0 (0%)	96 (16%)	6 (4%)	<0.001*
Problematic substance use	9 (6%)	2 (4%)	48 (19%)	1 (0.9%)	19 (9%)	1 (7%)	76 (12%)	4 (2%)	<0.001*
Contact with mental health services (years) mean (SD)	24.4 (11.8) (140 users)	22.5 (9.4)	13.1 (10.0) (242 users)	17.4 (10.3)	16.5 (10.9) (142 users)	18.5 (12.0)	17.0 (11.7)	18.9 (10.4)	0.062
Previous admission, mean (SD) Previous involuntary	3.8 (4.2) 1.8 (2.3)	13.8 (13.1) 1.2 (1.6)	3.7 (4.2) 1.6 (2.4)	9.9 (14.1) 0.9 (2.0)	2.7 (4.2) 1.1 (1.7)	3.4 (5.4) 0.5 (1.9)	3.4 (4.2) 1.5 (2.2)	10.0 (13.4) 0.98 (2.0)	<0.001* 0.060*
admissions, mean (SD)									

accommodation with a partner/parents or other (e.g. prison, homeless, hospital, etc.)	Other supported accommodation61 (39%)Independent accommodation with a98 (61%)	28 (62%) 17 (38%)	98 (39%) 153 (61%)	54 (50%) 54 (50%)	70 (34%) 139 (66%)	5 (36%) 9 (64%)	229 (37%) 390 (63%)	87 (52%) 80 (48%)	<0.001*
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	Ту	pe 1	Tyj	pe 2	Ty	pe 3	Total			
	RC	CTRP	SH	СА	FO	GAP	Total England	Total Verona, Italy	p-value	
Ν	158	45	251	108	207	14	616	167		
Met needs Mean (SD)	9.9 (4.4)	8.1 (3.3)	4.3 (3.0)	10.2 (3.5)	6.8 (3.1)	9.4 (3.2)	6.6 (4.1)	9.3 (3.5)	<0.001*	
Unmet needs	1.1 (1.6)	4.5 (3.9)	1.3 (2.0)	2.7 (3.0)	1.9 (2.5)	2.8 (2.8)	1.4 (2.1)	3.6 (3.6)	<0.001*	
Mean (SD) Total needs Mean (SD)	11.0 (4.5)	12.6 (3.8)	5.6 (3.9)	12.9 (2.8)	8.7 (3.7)	12.2 (3.4)	8.1 (4.5)	12.5 (3.5)	<0.001*	
Quality of life (MANSA scores)										
N	157	45	251	108	209	14	617	167		
MANSA total mean (SD) score	4.9 (0.7)	5.0 (0.8)	4.7 (0.7)	4.8 (0.7)	4.3 (0.9)	5.0 (0.8)	4.6 (0.9)	4.9 (0.8)	<0.001*	

Table 3. Needs and quality of life of users of supported accommodation in England and Verona, Italy.