

## Data supplement

<b>Table DS1</b> Demographic characteristics of patients with and without carers					
	No carer pathway		Carer pathway		
	TAU ( <i>n</i> =112)	CBT ( <i>n</i> =106)	TAU ( <i>n</i> =28)	CBT ( <i>n</i> =27)	FI ( <i>n</i> =28)
Mean age: years (s.d.)	37.1 (10.9)	39.1 (10.3)	35.6 (11.2)	38.6 (12.2)	35.0 (12.3)
Gender ( <i>n</i> )					
Male	77	74	19	21	20
Female	35	32	9	6	8
Ethnicity ( <i>n</i> )					
White	82	65	23	23	24
Black Caribbean	7	13	1	1	1
Black African	14	12	0	1	1
Black other	4	3	0	0	0
Indian	0	5	0	0	0
Other	5	8	4	2	2
Employment ( <i>n</i> )					
Employed	4	4	4	1	3
Employed part time	4	2	0	0	3
Voluntary employment	1	7	0	0	2
Unemployed	97	87	20	25	20
Student	5	3	3	0	0
Retired	1	0	1	1	0
Housewife/husband	0	2	0	0	0
Unknown	0	1	0	0	0
Marital status ( <i>n</i> )					
Single	89	77	18	14	20
Married	2	7	6	9	7
Divorced/separated	18	21	3	3	1
Widowed	1	1	0	1	0
Unknown	2	0	1	0	0

CBT, cognitive-behavioural therapy; FI, family intervention; TAU, treatment as usual.

<b>Table DS2</b> Clinical characteristics of patients with and without carers					
	No carer pathway		Carer pathway		
	TAU ( <i>n</i> =112)	CBT ( <i>n</i> =106)	TAU ( <i>n</i> =28)	CBT ( <i>n</i> =27)	FI ( <i>n</i> =28)
Diagnosis ( <i>n</i> )					
Schizophrenia	95	92	22	25	23
Schizo-affective disorder	17	10	6	2	5
Delusional disorder	0	4	0	0	0
In-patient ( <i>n</i> )	78	76	18	16	16
Out-patient ( <i>n</i> )	34	30	10	11	12
Mean length of illness in years (s.d.)	9.9 (8.7)	10.9 (8.1)	10.5 (8.6)	10.9 (9.7)	13.3 (11.8)
Mean number of admissions (s.d.)	4.4 (4.4)	5.0 (5.6)	4.6 (5.5)	3.4 (3.2)	6.5 (9.2)
History of violence ( <i>n</i> )					
No	79	66	23	20	21
Yes	30	35	5	7	7
History of suicide or self-harm ( <i>n</i> )					
No	65	65	15	16	14
Yes	42	35	13	11	12

CBT, cognitive-behavioural therapy; FI, family intervention; TAU, treatment as usual.

<b>Table DS3 Carer characteristics</b>			
	<b>TAU</b>	<b>CBT</b>	<b>FI</b>
Mean age: years (s.d.)	54.5 (11.6); <i>n</i> =24	48.3 (11.8); <i>n</i> =23	55.2 (15.0); <i>n</i> =23
Gender ( <i>n</i> )			
Male	10	5	9
Female	18	20	19
Ethnicity ( <i>n</i> )			
White	23	23	24
Black Caribbean	1	0	1
Black African	0	1	1
Black-other	0	0	0
Indian	0	0	0
Other	3	1	1
Employment ( <i>n</i> )			
Employed	9	6	5
Employed part time	4	3	3
Voluntary employment	0	0	1
Unemployed	7	13	9
Student	0	1	0
Retired	5	0	3
Housewife/husband	2	1	5
Unknown	1	3	1
Marital status ( <i>n</i> )			
Single	3	3	3
Married	14	15	18
Divorced/separated	3	4	3
Widowed	4	2	3
Cohabiting	3	0	0
Unknown	1	3	1
Relationship to patient ( <i>n</i> )			
Parent	14	9	18
Spouse/partner	11	11	8
Sibling	2	4	1
Son/daughter	0	1	0
Other	1	0	0
Mean amount of face-to-face contact with patient per week, hours (s.d.)	44.3 (25.2); <i>n</i> =24	38.6 (22.7); <i>n</i> =25	34.0 (23.2); <i>n</i> =22
EE rating ( <i>n</i> )			
High	10	7	12
Low	18	19	16
Mean GHQ total score (s.d.)	52.2 (11.6); <i>n</i> =27	55.4 (16.4); <i>n</i> =20	56.2 (16.0); <i>n</i> =26
CBT, cognitive-behavioural therapy; EE, expressed emotion; FI, family intervention; GHQ, General health Questionnaire; TAU, treatment as usual.			

**Table DS4** Mean scores for psychotic symptom measures for each treatment group for patients with and without carers

	No carer pathway						Carer pathway								
	TAU			CBT			TAU			CBT			FI		
	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.
PANSS total															
Baseline	112	66.26	15.91	106	62.32	13.49	28	64.11	15.28	27	66.89	14.26	28	70.93	13.36
12 months	90	59.66	17.27	90	57.63	15.21	23	58.35	14.03	21	54.09	12.49	24	57.46	15.53
24 months	85	57.32	15.43	87	56.68	12.98	24	56.04	18.02	22	54.41	16.70	20	55.50	15.26
PANSS positive															
Baseline	112	19.04	5.20	106	17.99	5.41	28	16.50	5.33	27	17.11	6.01	28	17.86	4.54
12 months	90	16.49	6.47	90	15.39	6.37	23	15.09	5.23	21	13.95	5.69	24	14.54	5.24
24 months	85	15.32	6.01	87	16.02	6.44	25	14.24	6.11	22	14.23	6.41	21	16.52	6.90
PANSS negative															
Baseline	112	12.96	6.65	106	11.79	4.81	28	13.82	4.89	27	15.67	5.88	28	17.25	6.59
12 months	90	12.62	6.32	90	12.06	4.92	23	13.26	5.58	21	12.33	4.94	24	13.38	5.81
24 months	85	11.91	5.21	87	11.64	4.83	25	11.88	5.19	22	12.18	4.38	21	12.95	8.09
PANSS general															
Baseline	112	34.26	7.96	106	32.54	7.40	28	33.79	9.33	27	34.11	7.08	28	35.82	6.24
12 months	90	30.54	8.17	90	30.19	7.78	23	30.00	7.45	21	27.81	6.76	24	29.54	7.60
24 months	85	30.09	7.92	87	29.01	6.09	24	29.54	9.45	22	28.00	8.42	20	28.25	6.56
PSYRATS A1															
Baseline <sup>a</sup>	66	2.39	1.02	50	2.36	1.06	14	2.00	1.18	11	2.91	1.04	23	2.35	1.11
12 months <sup>a</sup>	50	1.28	1.51	40	1.40	1.48	10	2.40	1.26	10	1.50	1.78	19	1.63	1.61
24 months <sup>a</sup>	48	1.35	1.44	39	1.18	1.32	12	1.92	1.56	9	1.89	1.69	16	1.50	1.46
PSYRATS A8															
Baseline <sup>a</sup>	65	2.58	1.32	50	2.64	1.47	14	2.64	1.34	11	2.82	1.08	22	2.73	1.24
12 months <sup>a</sup>	50	1.30	1.61	40	1.35	1.72	10	2.30	1.49	10	1.50	1.72	19	1.53	1.74
24 months <sup>a</sup>	48	1.17	1.58	39	1.44	1.64	12	1.50	1.78	9	0.78	1.30	16	2.00	1.79
PSYRATS B1															
Baseline <sup>b</sup>	90	2.80	1.01	84	2.61	1.04	20	2.35	0.93	21	2.29	1.01	22	2.68	0.95
12 months <sup>b</sup>	69	1.70	1.44	69	1.54	1.29	16	1.00	1.03	16	1.68	1.40	19	1.84	1.21
24 months <sup>b</sup>	66	1.45	1.27	67	1.60	1.34	18	1.00	1.24	18	1.11	1.08	16	1.63	1.59
PSYRATS B4															
Baseline <sup>b</sup>	89	2.73	1.40	84	2.80	1.27	20	2.80	1.20	21	2.71	1.23	22	3.00	1.15
12 months <sup>b</sup>	70	1.80	1.78	69	1.84	1.75	16	2.13	1.89	16	1.50	1.55	19	2.32	1.57
24 months <sup>b</sup>	65	1.75	1.66	67	1.61	1.71	18	1.50	1.76	18	1.61	1.72	16	1.63	1.68

CBT, cognitive-behavioural therapy; FI, family intervention; PANSS, Positive and Negative Syndrome Scale; PSYRATS, Psychotic Symptom Rating Scale (A1, hallucination frequency; A8, hallucination distress; B1, delusional conviction; B4, delusional distress); TAU, treatment as usual.  
a. If PSYRATS A1 >0 at baseline.  
b. If PSYRATS B1 >0 at baseline.

**Table DS5** Mean scores for other symptoms and social function scores in patients with and without carers

	No carer pathway						Carer pathway									
	TAU			CBT			TAU			CBT			FI			
	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	
BDI																
Baseline	108	20.94	13.66	103	21.53	12.12	28	20.57	13.33	27	24.89	12.56	27	28.96	13.92	
12 months	83	17.52	13.90	83	15.66	13.07	21	12.05	10.66	20	18.75	14.33	23	20.87	13.32	
24 months	77	17.18	13.10	78	15.19	11.63	24	16.04	14.82	22	15.54	10.91	18	21.39	13.87	
BAI																
Baseline	101	19.95	14.79	97	19.31	13.60	27	16.07	12.18	25	18.44	11.90	26	28.81	17.63	
12 months	80	14.19	12.42	75	15.31	12.53	21	10.33	8.91	19	15.53	12.86	22	16.32	14.95	
24 months	76	15.17	12.80	76	16.58	14.40	22	14.68	9.79	22	15.82	14.67	18	16.41	12.79	
Time budget total																
Baseline	101	53.36	21.76	97	47.52	15.59	25	51.32	20.43	25	46.16	22.72	27	49.11	21.44	
12 months	87	54.97	23.06	77	57.26	19.12	19	51.53	25.76	19	62.16	28.22	22	50.14	16.38	
24 months	78	56.41	23.38	82	56.45	18.37	24	53.54	23.70	21	59.67	18.10	19	59.79	20.03	
Time budget zero/one																
Baseline	101	10.96	8.17	97	12.39	7.08	25	13.16	7.37	25	13.24	9.47	27	12.81	8.15	
12 months	87	9.83	8.38	78	8.79	7.38	19	12.32	9.57	19	8.89	7.76	22	12.18	6.45	
24 months	78	9.94	9.14	82	8.67	7.41	24	12.00	8.97	21	8.29	7.06	19	8.58	8.44	
SOFAS																
Baseline	112	51.84	15.29	106	49.44	12.82	28	55.21	14.77	27	51.07	15.66	28	52.11	15.89	
12 months	90	51.88	15.47	90	52.02	15.92	23	53.26	14.94	21	60.91	13.83	24	55.58	13.09	
24 months	85	52.07	15.96	85	53.04	13.31	25	57.04	16.83	22	59.73	14.53	19	58.37	20.26	
EuroQol , 24 months	74	62.68	20.54	71	60.17	22.99	24	63.67	18.49	21	52.52	22.76	16	54.38	29.28	

BAI, Beck Anxiety Inventory; BDI, Beck Depression Inventory; CBT, cognitive-behavioural therapy; FI, family intervention; EuroQol, Quality of Life measure; SOFAS, Social and Occupational Functioning Assessment Scale; TAU, treatment as usual; zero/one, mean number of time periods rated 0 or 1 on time budget.

<b>Table DS6</b> Selected change scores in patients with carers															
	No carer pathway						Carer pathway								
	TAU			CBT			TAU			CBT			FI		
	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.	<i>n</i>	Mean	s.d.
PANSS total															
0–12 months	13	2.85	19.84	15	11.27	17.44	23	2.52	15.11	21	10.57	11.29	24	14.42	16.22
0–24 months	12	5.00	8.54	15	14.67	18.23	24	5.71	16.75	22	11.05	13.94	20	15.05	17.39
PANSS general															
0–12 months	13	0.92	10.51	15	5.33	7.61	23	1.74	8.89	21	5.00	6.39	24	6.63	8.77
0–24 months	12	1.83	5.11	15	7.33	8.64	24	2.63	8.21	22	5.32	7.75	20	7.75	7.38
BDI															
0–12 months	10	10.7	11.78	12	5.33	11.91	21	6.95	7.49	20	4.85	13.82	23	8.26	12.30
0–24 months	11	5.45	11.02	11	7.64	13.84	24	3.42	15.34	22	8.55	11.03	18	7.61	11.29

BDI, Beck Depression Inventory; CBT, cognitive-behavioural therapy; FI, family intervention; PANSS, Positive and Negative Syndrome Scale; TAU, treatment as usual.