### **APPENDIX 11. FOREST PLOTS**

#### **ASSERTIVE COMMUNITY TREATMENT**

# 1.1 Assertive community treatment compared with treatment as usual

#### Mental health

#### 1.1.1 Brief Psychiatric Rating Scale (24-item)

	ACT TAU						Std. Mean Difference	Std. Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
Fletcher 2008a	1.83	0.76	47	1.83	0.62	24	49.0%	0.00 [-0.49, 0.49]		
Fletcher 2009b	1.85	0.77	53	1.83	0.62	24	51.0%	0.03 [-0.46, 0.51]	+	
Total (95% CI)			100			48	100.0%	0.01 [-0.33, 0.36]	<b>*</b>	
Heterogeneity: Tau <sup>2</sup> =				= 1 (P =	0.94);	I <sup>2</sup> = 0%	)		-2 -1 0 1 2	
Test for overall effect:	$\angle = 0.08$	3 (P = (	J.94)						Favours ACT Favours TAU	

#### 1.1.2 Depression (Depressive Symptom Scale)

	Enhanced case management				TAU			Std. Mean Difference		Std. M	ean Diffei	rence	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Ra	andom, 95	% CI	
Striley 2013	3.13	2.04	64	3.35	2.25	56	100.0%	-0.10 [-0.46, 0.26]					
Total (95% CI)			64			56	100.0%	-0.10 [-0.46, 0.26]			•		
Heterogeneity: Not ap Test for overall effect:	•	i8)						Favou	-4 irs case m	-2 anagen	0 ent Favo	2 ours TAU	4

#### 1.1.3 Mental Health Treatment Index (MHTI)

	Enhanced case management				TAU			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Striley 2013	0.02	0.07	64	0.01	0.03	56	100.0%	0.18 [-0.18, 0.54]	<b>—</b>
Total (95% CI)			64			56	100.0%	0.18 [-0.18, 0.54]	<b>→</b>
Heterogeneity: Not ap Test for overall effect:	•	33)						- Favours	-1 -0.5 0 0.5 1 s case management Favours TAU

#### 1.1.4 Homicidal-Suicidal Thought Index (HSTI)



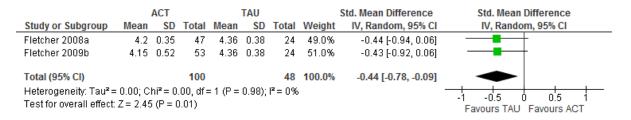
#### Substance use

#### 1.1.5 Severity of alcohol and drug use

	ACT TAU						Std. Mean Difference	Std. Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Fletcher 2008a	2.73	1.25	47	2.44	1.2	24	48.9%	0.23 [-0.26, 0.73]	<del>-   •</del>
Fletcher 2009b	2.58	1.11	53	2.44	1.2	24	51.1%	0.12 [-0.36, 0.60]	-
Total (95% CI)			100			48	100.0%	0.18 [-0.17, 0.52]	•
Heterogeneity: Tau² =	= 0.00; C	-1 -05 0 05 1							
Test for overall effect	Z = 1.00	Favours ACT Favours TAU							

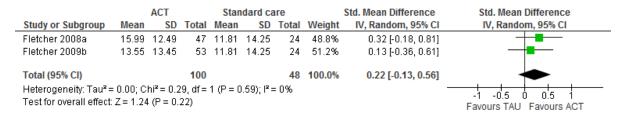
#### Acceptability of services

#### 1.1.6 Service user satisfaction



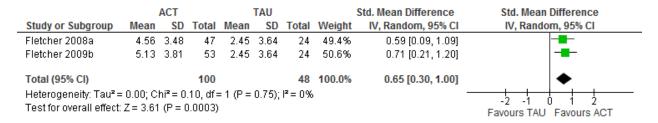
#### Adaptive functioning

#### 1.1.7 Housing (days living in stable housing)

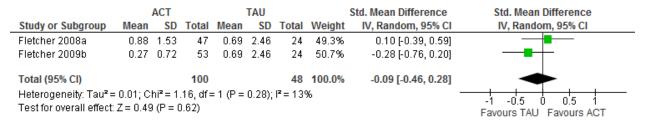


#### Service utilisation

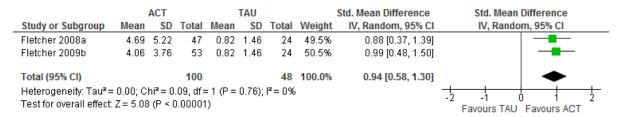
#### 1.1.8 Mean number of days of contact with assigned treatment programme



# 1.1.9 Mean number of days discussing substance use problems with assigned programme



### 1.1.10 Mean number of days they had speaking with assigned programme on the phone

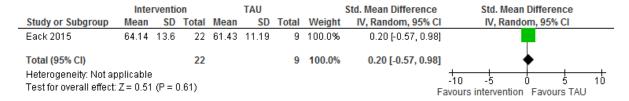


#### INTEGRATED TREATMENT<sup>1</sup>

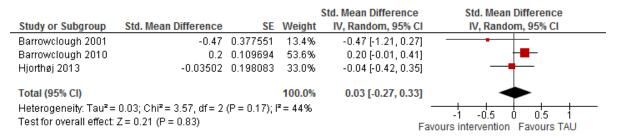
# 1.2 Integrated treatment compared with treatment as usual

#### Mental health

# 1.2.1 Mental health (composite score based on scores from: Brief Psychiatric Rating Scale, Wing Negative Symptom Scale, Raskin Depression Scale and Covi Anxiety Scale)



#### 1.2.2 Psychotic symptoms (PANSS total)



<sup>&</sup>lt;sup>1</sup> Integrated treatment here refers to any intervention which was delivered in the context of a multidisciplinary team in combination with usual care

#### 1.2.3 Psychotic symptoms (PANSS positive scale)

				Std. Mean Difference		Std. Me	an Diffe	erence	
Study or Subgroup	Std. Mean Difference	SE	Weight	IV, Random, 95% CI		IV, Rai	ndom, 9	5% CI	
Bonsack 2011	-0.22476	0.254933	100.0%	-0.22 [-0.72, 0.27]					
Total (95% CI)			100.0%	-0.22 [-0.72, 0.27]			•		
Heterogeneity: Not ap Test for overall effect:	•			Fa	-4 avour	-2 s interventi	0 ion Fav	2 ours TAL	<del> </del> 

#### 1.2.4 Psychotic symptoms (PANSS negative scale)



### 1.2.5 Relapse (number of people with an exacerbation of symptoms for ≥2 weeks or hospital admission)



## 1.2.6 Relapse (number of people with an exacerbation of symptoms for ≥2 weeks)



#### 1.2.7 Hospital admission (number of people admitted)

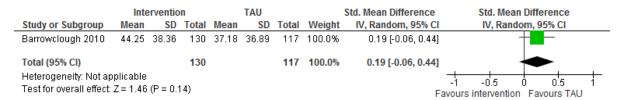
	Interven	ition	TAL	J		Risk Ratio	Risk Ratio			
Study or Subgroup	Events	Total	<b>Events</b>	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI			
Barrowclough 2010	38	163	33	163	75.6%	1.15 [0.76, 1.74]	-			
Bonsack 2011	9	30	11	32	24.4%	0.87 [0.42, 1.80]				
Total (95% CI)		193		195	100.0%	1.08 [0.75, 1.54]	<b>*</b>			
Total events	47		44							
Heterogeneity: Tau² =	•			= 0.51	); I² = 0%		01 02 05 1 2 5 10			
Test for overall effect:	Z = 0.40 (F)	P = 0.69	9)			F	avours intervention Favours TAU			

#### Substance use

#### 1.2.8 Substance use (mean % of days abstinent from main drug)

	Intervention TAU						Std. Mean Difference	Std. Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Barrowclough 2010	51.29	39.8	129	48.77	39.69	117	100.0%	0.06 [-0.19, 0.31]	-
Total (95% CI)			129			117	100.0%	0.06 [-0.19, 0.31]	<b>*</b>
Heterogeneity: Not ap Test for overall effect:			.62)					Fa	-1 -0.5 0 0.5 1

#### 1.2.9 Substance use (mean % of days abstinent from any drug)

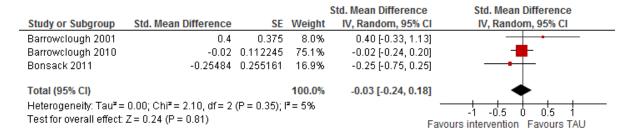


# 1.2.10 Substance use (abstinence from drugs or alcohol by the end of the study)



#### Adaptive functioning

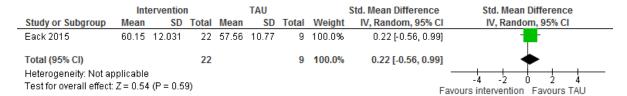
#### 1.2.11 Global assessment of functioning



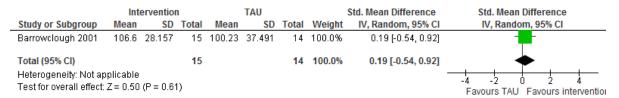
#### 1.2.12 Quality of life (Manchester Short Assessment of Quality of Life)



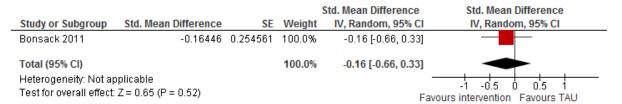
# 1.2.13 Social functioning (composite score based on scores from: Social Adjustment Scale-II, Major Role Adjustment Inventory and the Global Assessment Scale)



#### 1.2.14 Social functioning (Social Functioning Scale)



# 1.2.15 Social and occupational functioning (Social and Occupational Functioning Assessment Scale)

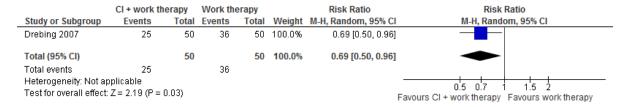


#### OTHER INTERVENTIONS

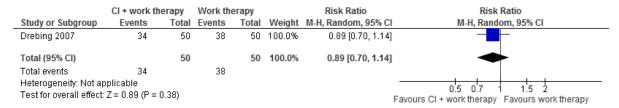
# 1.3 Contingency management combined with compensated work therapy compared with compensated work therapy alone

#### Substance use

#### 1.3.1 Substance use relapse (16 weeks' follow-up)

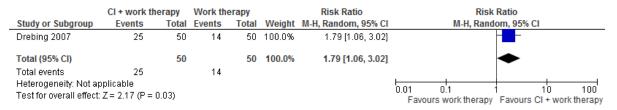


#### 1.3.2 Substance use relapse (39 weeks' follow-up)



#### Adaptive functioning

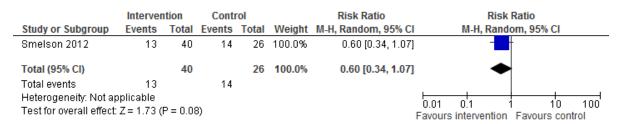
#### 1.3.3 Employment



# 1.4 Time-limited care co-ordination compared with a matched attention control

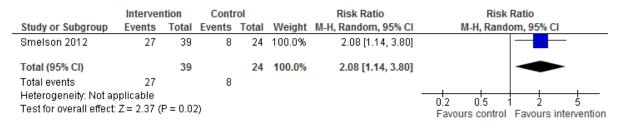
#### Substance use

#### 1.4.1 Alcohol use (in the previous 30 days)



#### Service utilisation

#### 1.4.2 Attending an outpatient appointment



# 1.5 Shelter-based psychiatric clinic compared with treatment as usual

#### Adaptive functioning

#### 1.5.1 Employment (number of participants)



#### 1.5.2 Housing (number of participants)



#### Service utilisation

### 1.5.3 Attending community mental health appointment (attending ≥1 community mental health appointments)



### 1.5.4 Attending community mental health appointment (attending ≥2 community mental health appointments)



# 1.5.5 Attending community mental health appointment (attending ≥3 community mental health appointments)



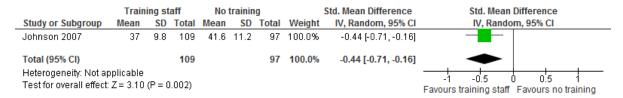
# 1.5.6 Attending substance use programme (includes only participants who had a substance use disorder)



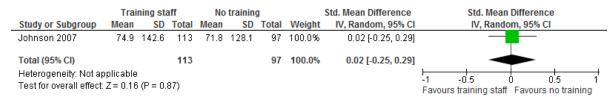
#### 1.6 Staff training compared with no training

#### Mental health

#### 1.6.1 Brief Psychiatric Rating Scale (24-item)



#### 1.6.2 Hospital admission (mean days in hospital)

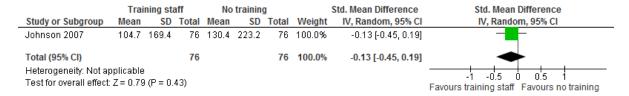


#### 1.6.3 Hospital admission (number of participants admitted)



#### Substance use

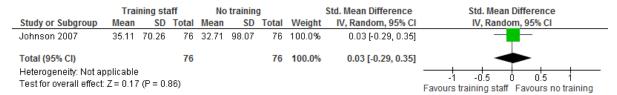
#### 1.6.4 Alcohol use (total standard units)



#### 1.6.5 Alcohol use (number of participants using)



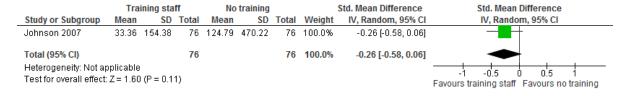
#### 1.6.6 Cannabis use (total monetary value)



#### 1.6.7 Cannabis use (number of participants using)



#### 1.6.8 Other drug use (total monetary value)



#### 1.6.9 Other drug use (number of participants using)

	Training	raining staff No training				Risk Ratio	Risk Ratio				
Study or Subgroup	Events	Total	<b>Events</b>	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI				
Johnson 2007	12	76	13	76	100.0%	0.92 [0.45, 1.89]	_				
Total (95% CI)		76		76	100.0%	0.92 [0.45, 1.89]	-				
Total events	12		13								
Heterogeneity: Not as	oplicable						01 02 05 1 2 5 10				
Test for overall effect:	Z = 0.22 (F	P = 0.83	)				Favours training staff Favours no training				

#### Adaptive functioning

#### 1.6.10 Social functioning (Life Skills Profile)

	Trair	ning st	aff	No	No training Std. Mean Diffe				e Std. Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95%	CI		
Johnson 2007	121	16.3	109	120.5	15.8	97	100.0%	0.03 [-0.24, 0.30]	-			
Total (95% CI)			109			97	100.0%	0.03 [-0.24, 0.30]	<b>*</b>			
Heterogeneity: Not ap Test for overall effect:			).82)						-2 -1 0 Favours no training Favour	2 rs training staff		

#### 1.6.11 Quality of life (Manchester Short Assessment of Quality of Life)

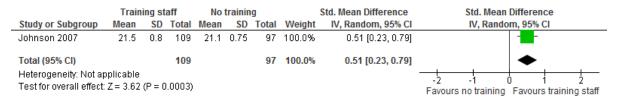
	Trair	ning st	aff	No	trainin	g		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Johnson 2007	53.4	12.1	109	50	12.8	97	100.0%	0.27 [-0.00, 0.55]	<b>-</b>
Total (95% CI)			109			97	100.0%	0.27 [-0.00, 0.55]	<b>→</b>
Heterogeneity: Not ap Test for overall effect:			).05)						-1 -0.5 0 0.5 1 Favours no training Favours training staff

#### Acceptability of services

#### 1.6.12 Service user satisfaction (Client Satisfaction Questionnaire)

	Train	ing st	aff	No t	rainir	ıg		Std. Mean Difference	ce Std. Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI			
Johnson 2007	23.5	6.5	109	23.4	6.3	97	100.0%	0.02 [-0.26, 0.29]	+			
Total (95% CI)			109			97	100.0%	0.02 [-0.26, 0.29]	<b>*</b>			
Heterogeneity: Not ap Test for overall effect:			).91)						-2 -1 0 1 2 Favours no training Favours training staff			

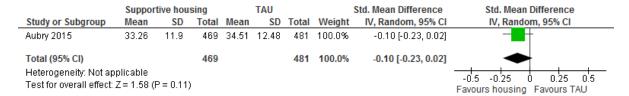
#### 1.6.13 Treatment satisfaction (Treatment Perceptions Questionnaire)



# 1.7 Supportive housing compared with treatment as usual

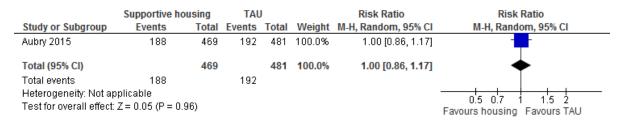
#### Mental health

#### 1.7.1 Mental health (Colorado Symptom Index)



#### Substance use

#### 1.7.2 Substance use (≥2 substance-use problems in the past month)

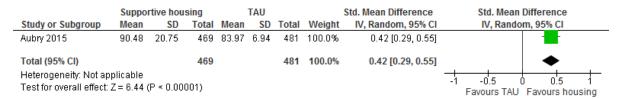


#### Adaptive functioning

#### 1.7.3 Housing (number of participants in stable housing)



#### 1.7.4 Quality of life (Quality of Life Interview-20)



#### 1.7.5 General functioning

	Suppor	tive hou	sing	ing TAU				Std. Mean Difference	Std. Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI			
Aubry 2015	62.46	8.66	469	60.34	9.09	481	100.0%	0.24 [0.11, 0.37]	-			
Total (95% CI)			469			481	100.0%	0.24 [0.11, 0.37]	•			
Heterogeneity: Not ap Test for overall effect:	•	P = 0.00	02)						-1 -0.5 0 0.5 1 Favours TAU Favours housing			

# 1.8 Supportive text messaging compared with control messages

#### Mental health

#### 1.8.1 Depression (Beck Depression Inventory-II)



#### Substance use

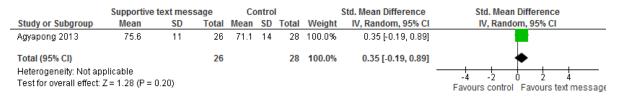
#### 1.8.2 Drink related beliefs (Obsessive-compulsive drinking scale)

	Supportive text message			Control			Std. Mean Difference		Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Agyapong 2013	7.7	4.9	26	10.7	7.7	28	100.0%	-0.45 [-1.00, 0.09]	-
Total (95% CI)			26			28	100.0%	-0.45 [-1.00, 0.09]	•
Heterogeneity: Not applicable Test for overall effect: Z = 1.65 (P = 0.10)								Fa	-2 -1 0 1 2

#### 1.8.3 Alcohol use (mean days abstinent)

	Supportive	ipportive text message			Control			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Agyapong 2013	84.14	9.2	26	74.73	28.97	28	100.0%	0.42 [-0.12, 0.97]	+
Total (95% CI)			26			28	100.0%	0.42 [-0.12, 0.97]	<b>◆</b>
Heterogeneity: Not ap Test for overall effect:	•	-2 -1 0 1 2 Favours control Favours text message							

# 1.8.4 Confidence in abstaining from alcohol (alcohol abstinence self-efficacy scale)



#### Adaptive functioning

#### 1.8.5 Global assessment of functioning

