

# Forensic Assertive Community Treatment: A Review of the Literature

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**Abstract** An extensive body of literature provides evidence supporting the effectiveness of assertive community treatment (ACT) with regard to non-forensic outcome measures, such as number of hospital admissions and length of stay. However, research findings on the effectiveness of ACT for forensic outcome measures, such as rearrests or detentions, is much less clear. The present review, therefore, focuses on the application of ACT in forensic populations, combining key elements of ACT with elements of forensic rehabilitation models. Specifically, a review of the literature was conducted using a systematic methodology in an attempt to combine evidence-based elements of 40 years of research on regular ACT with elements of forensic rehabilitation models. Results reveal limited yet promising evidence in support of the effectiveness of

forensic ACT for forensic outcome measures. Implications for future research and clinical practice are discussed.

**Keywords** Assertive community treatment · Forensic · Effectiveness · Outcome

## Introduction

Since its development in the 1970s, assertive community treatment (ACT) has been a well-established means of service delivery for severely mentally ill patients (Stein and Test 1980). A large body of literature provides evidence in support of the effectiveness of ACT with regard to non-forensic outcome measures, such as the number of hospital admissions, length of stay during hospital admission, quality of life, adherence to treatment, clinical outcome, and client satisfaction (Burns and Firn 2002; Coldwell and Bender 2007; Crawford et al. 2004; Marshall and Lockwood 2011; Torrey and Zdanowics 2001; Van der Stel 2002). Key elements of ACT are (a) home-based treatment, (b) involvement of a psychiatrist, (c) small caseload, (d) integrated dual diagnosis treatment specialists, (e) integrated vocational therapy, and (f) 24/7 service delivery (Burns in Williams et al. 2011; De Witte et al. 2014; Drake et al. 2001). Given the great diversity of outpatient service delivery initiatives, the Dartmouth ACT Scale (DACTS; Teague et al. 1998), was developed to assess model adherence of ACT teams and ranges between 0 and 5, with five representing maximum model fidelity.

Although ACT has been researched extensively, a comprehensive review reported that regular ACT has demonstrated either no effect or a negative effect on forensic outcome measures, such as incarcerations, arrests, and bookings (Bond et al. 2001). Hence, there is a need for a specialized adaptation of ACT for use among forensic

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populations to target forensic outcomes more successfully, retaining the same effectiveness observed for non-forensic outcomes (Beach et al. 2013; Cuddeback et al. 2008; Holloway et al. 1995; Lamberti et al. 2004; Morrissey et al. 2007). This approach is in line with recommendations for evidence-based policy options to reduce criminal outcome measures, which suggest the need for a highly intense and treatment-oriented model of care (Drake et al. 2009; Skipworth 2005; Wiederanders et al. 1997). In addition, the development of effective community-based interventions is in accordance with current mental health developments supported by the World Health Organization (Drake and Latimer 2012).

Forensic ACT (ForACT) teams should implement the key components of regular ACT as well as the basic elements of forensic rehabilitation (Lamberti et al. 2004; Robertson et al. 2011). Current forensic rehabilitation models consist mainly of the Risk Need Responsivity model (RNR; Andrews and Bonta 2010) and the Good Lives Model (GLM; Ward and Maruna 2007). RNR is a risk-oriented model with a strong evidence base, whereas GLM is a strength-oriented model that broadens RNR's risk perspective to a more holistic model. To be effective, intervention intensity should be proportionate to the amount of risk (risk principle) and should target risk-related needs (needs principle), such as antisocial attitudes or poor coping skills, while the intervention must be tailored to the individual's specific traits, such as intelligence or personality traits (responsivity principle). The forensic adaptation of any regular model should implement at least two elements. First, all rehabilitation models emphasize a hybrid functioning of the clinician, combining a therapeutic task with a control task. This is demonstrated through good communication with justice departments, such as probation officers (Andrews and Bonta 2010; Cuddeback et al. 2008; Davis et al. 2008; Morrissey et al. 2007; Ward and Maruna 2007). Second, forensic rehabilitation relies on specialized risk assessments (Andrews and Bonta 2010; Lamberti et al. 2004; Robertson et al. 2011).

The present article reviews the extant literature on specialized forensic adaptations of ACT that target mentally ill offenders. First, this review focuses on forensic outcome measures, such as arrests, bookings, and incarcerations. Second, the article reviews findings on effectiveness with regard to non-forensic outcomes, such as hospitalizations, length of stay, and quality of life. Third, the state of the evidence on factors related to both forensic and non-forensic outcomes is outlined. These outcomes include sociodemographic, clinical, and model-related factors, such as model adherence.

## Methods

The Internet databases PsycINFO, Pubmed, and Web of Science were searched for English-language peer-reviewed articles on ForACT dating from 1990 through September

2014, using the search terms “assertive community treatment” in combination with “forensic” or “mentally ill offenders.” In total, 681 records were identified, of which 533 were retained after excluding doubles, as well as records reporting exclusively on sex offenders or learning disabled clients. Screening the titles and abstracts resulted in the exclusion of an additional 515 records, most of which focused on diversion techniques rather than ACT. The full texts of the remaining 18 records were then examined. These 18 records were screened for the implementation of at least four of the six core principles of regular ACT and the two core elements of forensic adaptation (i.e., a way of communicating with the justice department and an assessment before admission), as the latter were deemed essential to the nature of a ForACT team. Ultimately, 11 records reporting on nine studies were included in the present review. An overview of the methods used is presented in Fig. 1 following PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analysis, Moher et al. 2009).

The authors report no known conflicts of interest and certify responsibility for the review.

## Results

The included studies, which adhere to at least four of the six core elements of regular ACT and to the two core elements of Forensic rehabilitation are outlined in Table 1.

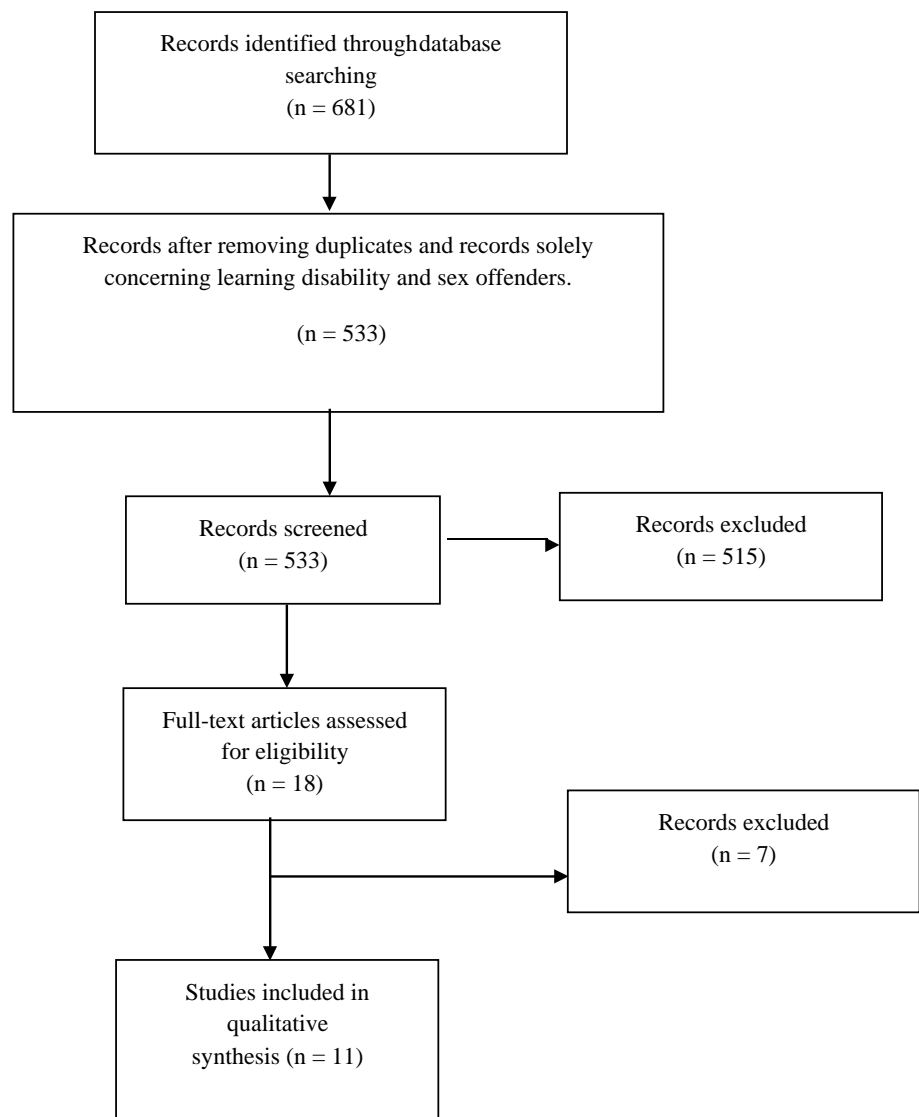
Results are discussed with regard to (a) forensic outcome measures, (b) non-forensic outcome measures, and (c) factors related to outcomes. The first two of these are also presented in Table 2.

Of the 11 included records, three reported the results of randomized controlled trials (RCTs) and eight reported on non-controlled studies.

### Forensic Outcome Measures

#### RCTs

Solomon and Draine (1995) compared ForACT ( $n = 60$ ) with regular ACT including a forensic specialist/advisor ( $n = 60$ ) and in an outpatient clinic ( $n = 60$ ). The ForACT clients were recruited after they were released from prison, and the follow-up period was limited to 1 year. The ForACT clients performed worse in terms of forensic outcome measures than did the clients belonging to either of the regular ACT control groups. However, these results should be interpreted in light of the weak power (0.72) and very high drop-out rates in both control groups (41 and 73 %, respectively, after 1 year). Moreover, the ForACT team had no residential back-up, leading to wrongful incarcerations for clients refusing the prescribed medication. Finally, model

**Fig. 1** PRISMA flow chart

adherence was compromised by the long-term absence of staff and difficulties in performing high rates of home visits.

Cosden et al. (2005) compared ForACT ( $n = 137$ ) with Treatment As Usual (TAU;  $n = 98$ ), finding non-significant differences in forensic outcomes. However, the ForACT group included clients who were referred by mental health courts, specialized courts that provide an intensive justice-driven follow-up of mentally ill clients (Steadman et al.

2001). As such, ForACT constituted a diversion setting for which clients volunteered to avoid prosecution. Clients appeared in court twice a week, suggesting an overemphasis on the controlling task, which may disrupt the therapeutic alliance. Additionally, when the 5% of patients responsible for 54% of incarcerations were excluded from the analyses, significant results in favor of the ForACT group were reported. This suggests that a small group of clients with a revolving-door pattern did not benefit from the ForACT model of care.

In 2010, Cusack, Morrissey, Cuddeback, Prins, and Williams compared ForACT ( $n = 72$ ) with TAU ( $n = 62$ ). The ForACT model was developed in California (Mentally Ill Offender Crime Reduction Grant, California Board of Corrections) and included a full-time probation assistant in the team, resulting in a high score of 4.5 on the DACTS. The TAU condition was reported to be very diverse, ranging from outpatient clinics to regular ACT. Significant results were found with regard to forensic outcomes over a 2 year period. Specifically, the incident rate ratios (IRRs) for the number of bookings during the first and second years were 0.45 and 0.51, respectively, favoring the ForACT condition ( $ps < .05$ ).

#### *Non-controlled Studies*

As reported, seven studies (Davis et al. 2008; Lamberti et al. 2004; Lurigio et al. 2000; McCoy et al. 2004; Parker 2004;

**Table 1** Included studies: core and forensic elements

	Core elements of regular ACT						Forensic elements	
	Home-based treatment	Involvement psychiatrist	Small caseload	Dual diagnosis treatment specialist	Vocational therapy	24/7 service delivery	Communication justice department	Assessment before admission
Cimino and Jennings (2002)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
Cosden et al. (2005)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cusack et al. (2010)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Davis et al. (2008)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
Lamberti et al. (2004)	Yes	Yes	Yes	NS	NS	Yes	Yes	Yes
Lurigio et al. (2000)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
McCoy et al. (2004)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
Parker (2004)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
Simpson et al. (2006)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Smith et al. (2010)	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes
Solomon and Draine (1995)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

NS not specified

Simpson et al. 2006; Smith et al. 2010) investigated ForACT without a control group in explorative designs varying between retrospective and longitudinal. All of these studies reported very low rates on forensic outcome measures. Parker (2004), for instance, reported only five arrests and no incarcerations over a 5 year period ( $n=83$ ), claiming that all arrests were due to breach of probation as opposed to new crimes. Similarly, McCoy et al. (2004) and Lamberti et al. (2004) reported good results on forensic outcome measures, such as the number of detentions, length of stay in prison, and arrests. They also reported a significant decrease in arrest rates during the 1st year of inclusion by 75 % ( $n=24$ ).

Smith et al. (2010) and Cimino and Jennings (2002) reported on a ForACT team operating in a continuum of care. The study targeted severely ill, dually diagnosed clients with a high-risk profile ( $n=93$ ). Inclusion in the ForACT team was the last step on a seven-step pathway, and clients spent on average 1181 days in residential care before inclusion. The rearrest rate during follow-up by the ForACT team was 5 %, and the re-incarceration rate was 1 %. These findings suggest the need for a residential stay for high-risk clients preceding inclusion in ForACT. Interestingly, Simpson et al. (2006) reported a 20 % recidivism rate after clients were transferred to a regular (non-forensic) ACT team and found recidivism in this context to be related to a present diagnosis of an antisocial personality disorder.

### Non-forensic Outcome Measures

#### RCTs

Of the three RCTs, only Cosden et al. (2005) reported on non-forensic outcome measures such as quality of life

(Lehman QOL interview; Lehman 1988), substance use severity (Addiction Severity Index; McLellan et al. 1985), and perceived stress (Perceived Stress Scale; Cohen et al. 1983). Both the ForACT group and the control group benefited from treatment in terms of all outcome measures, and the differences between the groups were not significant. Cusack et al. (2010) reported a significant advantage with regard to total admission days for the ForACT condition, with IRRs of 0.41 and 0.43 during the first and second year of follow-up, respectively. However, no significant difference was found for the number of admissions. This study also found lower inpatient costs for the ForACT group and a significantly lower total cost per patient when inpatient and outpatient costs were combined, although outpatient costs were higher (Cusack et al. 2010).

#### Non-controlled Studies

Lamberti et al. (2004) reported a decrease in hospitalization from 114 to 7.9 days ( $p < .01$ ) and a significant improvement in community functioning using the Multnomah Community Ability Scale (Barker et al. 1994), as well as an increase in the number of clients accepting substance use disorder-related treatment (SUD). In addition, they suggested that the way legal leverage is used might result in higher perceived wellbeing, stressing the importance of a therapeutic relation between clinicians and patients. McCoy et al. (2004) noted a 90 % decrease in hospitalization days during the first year of follow-up. Parker (2004) reported high admission rates of 14.6 %, and Smith et al. (2010) reported 20 % hospitalization rates.

Parker (2004), presenting the results from a 5 year follow-up of 83 clients, reported on a new outcome measure,

**Table 2** Study characteristics and forensic and non-forensic (hospitalizations) outcome measures

	Study characteristics				Outcome measures			
	RCT design	Location	Experimental group (n)	Control group (n)	Duration study (months)	Forensic	Non-forensic	
Cimino and Jennings (2002)	No	USA	18	NA	12	n = 0	n = 3	Hospitalizations
Cosden et al. (2005)	Yes	USA	137	98	18–24	ForACT = TAU	ForACT = TAU	ForACT > TAU
Cusack et al. (2010)	Yes	USA	72	62	24	ForACT > TAU	ForACT > TAU	NR
Davis et al. (2008)	No	USA	83	NA	60	NR	No effect	n = 60
Lamberti et al. (2004)	No	USA	60	NA	24	Decrease	Decrease	Decrease
Lurigio et al. (2000)	No	USA	8	NA	12	NR	NR	NR
McCoy et al. (2004)	No	USA	24	NA	NR	Decrease	Decrease	Decrease
Parker (2004)	No	USA	83	NA	60	NR	EAR: 5 %	EadmissR: 14.6 %
Simpson et al. (2006)	No	New Zealand	105	NA	12–24	NR	n = 0	19 %
Smith et al. (2010)	No	USA	91	NA	48	NR	Arrest rate: 5 %	NR
Solomon and Draine (1995)	Yes	USA	60	140	12	NR	60 %	ForACT < TAU
NR not reported, NA not applicable, EAR estimated arrest rate, the arrest rate over the community tenure, EadmissR estimated admission rate, the admission rate over the community tenure								ForACT = TAU

community tenure (CT), defined as the number of days actually spent in the community divided by the potential number of days that could have been spent in the community if never admitted or detained. He reported a CT of 85 % over 4 years, which he states to be comparable with the results of regular ACT. However, none of these studies reported on the reasons for admissions during follow-up.

**Factors Related to Outcomes**

Only one study (Erickson et al. 2009) reported on factors related to outcomes. The results of this study were taken from a 2004 study by Lamberti et al. Three significant factors were identified: a history of violent offending, a history of previous termination of psychiatric admissions, and the presence of antisocial personality traits. Data on personality traits were derived through patient records and this increased the risk of under-diagnosing the presence of a personality disorder. Surprisingly, the study revealed no correlation with SUD. However, the authors suspected that methodological shortcomings resulted in a lack of heterogeneity among substance users in the study (Erickson et al. 2009). In contrast, both Cosden et al. (2005) and Smith et al. (2010) reported a link between the severity of SUD and worse forensic outcomes during follow-up. Smith et al. (2010) linked higher rearrest rates to more time spent as a residential patient before inclusion in the ForACT team.

Parker (2004) found that a diagnosis of schizophrenia was a negative predictor of rearrests or hospitalisation (OR = .36,  $p < .05$ ). The length of the conditional release (OR = 1.51,  $p < .01$ ) and murder (OR = 0.25,  $p < .06$ ). were positive predictors This suggests that clients with a diagnosis of schizophrenia spent more time in hospital, presumably because of a relapse in psychosis.

**Discussion**

Regular ACT has established a strong evidence base; hence, the idea of adapting the model to forensic psychiatric patients is appealing and promising and has been supported by many authors (Cuddeback et al. 2008; Morrissey et al. 2007; Osher and Steadman 2007). The present paper, which aimed to review the extant literature on ForACT and its effectiveness, revealed that this literature is still very limited.

The results for forensic outcome measures are promising. However, these results have largely originated from non-controlled studies and should thus be interpreted in light of methodological shortcomings. Preventing recidivism is the primary aim in forensic community care and is thus considered the key outcome measure (Andrews and Bonta 2010). Results from controlled as well as non-controlled studies



have revealed very low arrest rates of less than 5 % (Parker 2004) and equally low rates of bookings and detentions (Cusack et al. 2010; Parker 2004; Simpson et al. 2006; Smith et al. 2010). Of the three RCTs in the present review, only one was able to demonstrate a significant effect of ForACT on number of arrests (Cusack et al. 2010). This study had a high model adherence, with a DACTS score of 4.5. Other controlled studies have suffered from a lack of model adherence (Cosden et al. 2005; Solomon and Draine 1995). Solomon and Draine (1995) explained how basic elements of regular ACT could not be adhered to during the duration of the study, and Cosden et al. (2005) described an ACT team closely linked to a mental health court. The intensity of the follow-up by the mental health court was very high, with twice-weekly contacts. This implied an overemphasis on control at the cost of the therapeutic alliance, resulting in a deviation from the hybrid functioning of clinicians in assertive outreach (Ward and Maruna 2007). In addition, it was difficult to fully blind the mental health court to the condition to which the patient was assigned, which undermined randomization (Cosden et al. 2005). Another methodological problem related to outpatient research was a high drop-out rate, especially in the control groups, resulting in low statistical power (Goethals and van Marle 2012; Solomon and Draine 1995). The results of the non-controlled studies have generally been positive, reporting a decrease in the numbers of arrests and bookings (Davis et al. 2008; Lamberti et al. 2004; McCoy et al. 2004). This adds support for the potential effectiveness of ForACT with regard to forensic outcomes. Information on the reasons for arrests has largely been lacking, with the exception of Parker (2004) reporting that all of the rearrests during the follow-up were due to breach of conditions.

With regard to non-forensic outcome measures, the evidence is even more limited. Regarding the number of hospital admissions, both controlled and non-controlled studies have reported only non-significant results for ForACT's effectiveness (Cusack et al. 2010; Lamberti et al. 2004; McCoy et al. 2004). Overall, no effect has been reported on number of admissions, and high admission rates have been found (Parker 2004). This is remarkable, because we would expect the effectiveness of regular ACT on number of admissions to be maintained in a forensic adaptation. A possible explanation is that admissions in a forensic setting may be a way to prevent recidivism, suggesting the importance of residential back-up (Jennings 2009; Parker 2004). None of the studies included in this review reported on the reasons for admission. In addition, information about length of stay during admissions is largely lacking and is limited to findings from non-controlled studies (Lurigio et al. 2000). Moreover, although other non-forensic outcome measures, such as wellbeing and clinical variables, have been reported to improve during ForACT, this improvement was no better

than the results of less intense models of service delivery (Cosden et al. 2005). The experience of coercion and dealing with legal leverage has been identified as dynamic in nature and a possible target for improving the general wellbeing of clients in ForACT (Lamberti et al. 2014).

With regard to factors related to outcomes, Erickson et al. (2009) reported on a non-controlled study by Lamberti et al. (2004). Erickson retained antisocial traits, previously failed residential care, and a history of previous arrests to predict recidivism. Surprisingly, substance use was not related to the outcomes in this study. However, the authors suspected that this was because of a lack of heterogeneity in substance use (Erickson et al. 2009). Cosden et al. (2005), in contrast, found a link between severity of SUD at intake and forensic outcomes. Aside from traditional forensic and non-forensic outcome measures, Parker (2004) introduced CT as an alternative way to evaluate the effectiveness of forensic community care. This is particularly useful, because overall forensic outcome rates are very low, making it difficult to conduct research on factors related to outcomes. As mentioned in the results, Parker reported a CT of 85 % over a 5 year period, which is consistent with findings on CT for regular ACT. He investigated factors related to high CT and found a diagnosis of schizophrenia to be negatively correlated with CT, suggesting that clients with psychoses spent more time in the hospital (Parker 2004). Of the three RCTs included in this review, only the one with a high model adherence reported significant results on forensic outcome measures, suggesting model adherence to be a crucial factor for success (Cusack et al. 2010). A small percentage of patients who accounted for a large amount of rearrests, known as revolving-door patients, did not seem to benefit from ForACT (Cosden et al. 2005).

In general, the extant studies on ForACT lacked comparability in terms of included diagnosis, standardized admission criteria, methodological issues, study location, and ways to incorporate a hybrid functioning of the clinician. This makes it difficult to draw conclusions or to generalize the studies' results.

Most of the included studies focused on patients with psychoses and provided little information on primary or comorbid DSM Axis 2 diagnoses, such as personality disorders or primary SUDs. In addition, all of the included studies retrieved diagnoses from patient records which risks under-diagnosing Axis 2 disorders. This is important, because evidence for the effectiveness of regular ACT for personality-disordered clients has been limited to date, and thus the effect cannot be hypothesized to be transferable to forensic adaptations of ACT (Lamberti et al. 2004). Moreover, antisocial traits are a well-known risk-enhancing element, and treating these successfully would thus be of great value (Hall et al. 2012; Harris 2002). Furthermore,

antisocial patients are at risk of being excluded by regular services (Roskes et al. 1999).

All of the included studies agreed that an SUD diagnosis was highly comorbid. However, only three of the studies explicitly reported the inclusion of an integrated SUD treatment component in the team. SUD is a known risk factor for recidivism, and failing to include a treatment plan for SUD can be expected to influence forensic outcomes negatively. Little has been reported in the literature about which type of patients—other than clients with psychoses—might benefit from ForACT.

Moreover, inclusion/exclusion criteria differed among the studies in terms of clinical factors such as diagnosis and admission criteria. The controlled studies included high percentages of female clients, who comprised 40–50 % of the samples. All of the studies excluded violent and third-strike offenders (Cosden et al. 2005; Cusack et al. 2010; Lurigio et al. 2000; Simpson et al. 2006). Some authors mentioned high risk as an exclusion criterion but failed to explain how this level of risk was established (Davis et al. 2008; Lurigio et al. 2000). Gender and history of violent offending are related to recidivism, and using these factors as exclusion criteria might influence forensic outcomes. All of the teams conducted an assessment prior to inclusion, which mostly served to exclude high-risk clients and, in many of the teams, violent offenders. However, details about how these assessments were conducted are absent, suggesting a lack of standardization in client inclusion. The use of well-known risk assessments might be of use here (Lamberti et al. 2004). Interestingly, Cimino and Jennings (2002) and Smith et al. (2010) specifically targeted high-risk patients and proposed using ForACT for these patients in a continuum of care model. This would suggest a different approach in which high-risk patients are referred to ForACT. Assessment at intake appears to set forensic adaptations of ACT apart from regular ACT, where thresholds are kept very low and severe illness is a criterion for inclusion (Burns in Williams et al. 2011; Stein and Test 1980). The use of motivational techniques in the inclusion phase of ForACT might be one way to bridge this gap (Ward and Maruna 2007).

Study design differed among the research reviewed here. The length of follow-up differed between the studies and was limited, with a maximum of 5 years ( $n = 2$ ); for most studies, the follow-up period was from 1 to 2 years ( $n = 7$ ). Again, length of follow-up is a known factor related to recidivism, and a longer follow-up time is recommended for reliable results with regard to effectiveness on forensic outcomes over the long term (Davies et al. 2007). Long-term follow-up of regular ACT is known to decrease its effectiveness (Davies et al. 2007).

All of the extant literature is U.S.-based, with the sole exception of one study conducted in New Zealand (Simpson et al. 2006). As such, the results cannot be generalized

to other parts of the world, because countries differ greatly in terms of the organization of justice and treatment of the mentally ill. Furthermore, the studies had rather small sample sizes.

Finally, teams differed on ways of communicating with justice departments and, thus, ways of incorporating a hybrid functioning of staff. A recent survey reported that in 69 % of 16 ForACT teams, a probation officer was included in the team (Lamberti et al. 2011).

### Strengths and Weaknesses of this Review

Given the great diversity of community-based treatment models, we believe it is a strength of this review that the core elements of regular ACT were combined with current forensic rehabilitation models to guide the selection of the literature to be reviewed. Although the threshold for inclusion was four of six core elements of ACT, in reality, 10 of the 11 included studies adhered to five of the six core elements. In other words, model adherence was high, and evidence-based elements of current community-based treatment models were included (Andrews and Bonta 2010; Drake et al. 2009).

The present review aimed to identify very specific studies with strict inclusion criteria to enhance model adherence. Although this exposed the limited nature of the existing literature on ForACT, it resulted in the exclusion of potentially interesting studies that did not report on adherence to the core forensic elements (e.g. Godley et al. 2000; Hartwell and Orr 1999). Furthermore, limiting the search to peer-reviewed articles written in English risks excluding potentially relevant non-English or non-published literature. Finally, although the present review followed a systematic methodology, the authors do not claim to have conducted a systematic review following contemporary state-of-the-art guidelines.

### Conclusion

In conclusion, the current literature on ForACT is limited but promising. All of the included studies reported that ForACT was associated with very low forensic outcomes, such as rearrests and incarcerations, and with decreases in arrest rates and number of detentions. ForACT seems to have no effect on the number of admissions, possibly because admissions are a way to prevent recidivism. This suggests the need for a good residential back-up for any ForACT team. However, ForACT does lead to fewer days spent as an inpatient. When inpatient and outpatient costs are combined, the total cost of follow-up is lower for ForACT compared to other types of community-based treatment, such as regular ACT or clinics. Wellbeing and clinical variables seem to improve

through ForACT, though the literature on non-forensic outcomes is very limited. Model adherence is a potential factor related to positive forensic outcomes that emerges from the current literature, so model adherence especially needs to be maintained over the full course of service delivery. Anti-social personality traits and a history of unsuccessful residential treatment or previous arrests are linked to negative results. Moreover, revolving-door clients and those exhibiting severe substance abuse at intake do not appear to benefit from ForACT. Finally, a diagnosis of schizophrenia might result in more time spent as an inpatient.

Overall, the literature lacks comparability and standardization. Studies differ in design and the use of control groups, length of the study period, inclusion criteria, assessment at inclusion, and outcome measures. All studies have focused on primary psychotic illnesses, and little information has been made available on primary personality disorders or SUDs. Furthermore, an alternative approach has been suggested for high-risk clients, in which ForACT is the final stage in a continuum of care, starting in a residential setting. Again, this implies the need for more standardized ways to include clients.

This review identifies the need for more research on the effectiveness of ForACT, especially for clients with a primary personality disorder, and for more research into factors related to outcomes.

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