# Client Outcomes Associated With Interprofessional Care in a Community Mental Health Outpatient Program

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## ABSTRACT

Interprofessional care (IPC) represents a high degree of collaboration among health professionals to provide comprehensive treatment to clients. Despite increased uptake of IPC in mental health care, few studies have examined its clinical effectiveness in actual practice. A retrospective cohort study examined the treatment outcomes for 183 outpatients with chronic and comorbid mental health difficulties treated with IPC in a community mental health setting. Multilevel modelling demonstrated that clients reported statistically significant improvement in mental health symptoms and functioning during IPC, relative to a waitlist interval. Furthermore, fewer clients reported clinically significant difficulty with symptoms and functioning over the course of treatment with IPC. Findings suggest that IPC may be an effective treatment in outpatient community mental health settings for Canadian adults presenting with chronic and comorbid psychopathology and affected psychosocial functioning.

Keywords: mental health outcomes; interprofessional care; collaborative care

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# RÉSUMÉ

Les pratiques interprofessionnelle requièrent un niveau élevé de collaboration entre les professionnels de la santé afin d'offrir un traitement global au client. Malgré le nouvel intérêt pour les pratiques interprofessionnelle dans le domaine des soins de santé mentale, peu d'études se sont penchées sur leur efficacité clinique. Une étude de cohorte rétrospective a examiné les résultats du traitement chez 183 clients avec des troubles chroniques et concomitants de santé mentale traités avec les pratiques interprofessionnelles dans un établissement de santé mentale communautaire. La modélisation multiniveaux a montré des améliorations statistiquement significatives quant aux symptômes de troubles mentaux et au fonctionnement pendant les pratiques interprofessionnelle, par rapport aux périodes où le client est en attente de traitement. De plus, moins de clients font état de problèmes cliniquement significatifs en matière de symptômes et de fonctionnement pendant la durée des traitements de pratiques interprofessionnelle. Des données indiquent que les pratiques interprofessionnelle peuvent constituer un traitement efficace dans un milieu de soins de santé mentale communautaire en consultation externe, pour les Canadiens adultes ayant des troubles psychopathologiques chroniques et concomitants ainsi que des problèmes de fonctionnement psychosocial.

Mots clés : résultats de santé mentale; pratiques interprofessionnelle; soins collaboratifs

Increased collaboration among health professionals is a recognized strategy to improve mental health services in Canada (Gagné, 2005; Kates, Gagné, & Whytem, 2008; Kates et al., 2011; Preachey, Hicks, & Adams, 2013) and internationally (World Health Organization, 2010). Collaborative care may provide more comprehensive interventions by including multiple providers from different professions, while also controlling healthcare costs through increased service coordination (Kates et al., 2008; Enhancing Interdisciplinary Collaboration in Primary Health Care Initiative [EICP], 2005; Rossen, Bartlett, & Herrick, 2008; Schmitt, 2001). The growing emphasis on collaboration among professions stems from the limitations of traditional approaches to adequately address the burden of mental illness, notably for clients with complex and diverse needs (Gagné, 2005; Kates et al., 2008; Kazdin & Blase, 2011; Mental Health Commission of Canada, 2009).

A number of national and provincial initiatives have led to the increased integration of collaborative approaches within Canada's healthcare system. Two prominent examples include the national Canadian Interprofessional Health Collaborative hub for collaborative care and education, and the provincial HealthForceOntario (HFO, 2007) blueprint for systemic integration of collaborative care into Ontario's health system. Collaborative care initiatives have also focused specifically on the mental health system (Kates et al., 2008), including the Canadian Collaborative Mental Health Initiative (CCMHI), the Canadian Psychiatric Association and College of Family Physicians of Canada Collaborative Working Group on Shared Mental Health Care (Kates et al., 2011), and a national annual Canadian Collaborative Mental Health Care conference to provide a forum for healthcare professionals, researchers, patients, and family members to exchange research and practice ideas (Kates et al., 2008), with the year 2016 marking its 17th offering.

#### **DEFINING INTERPROFESSIONAL CARE**

The term *collaborative care* is common in the literature and is an umbrella term for many different models of healthcare practice. The World Health Organization (2010) defines collaborative care as members

of different healthcare professions working together with patients, families, care providers, and communities to deliver the highest quality of care. In Canada, the CCMHI defines collaborative care as providers from different specialities, disciplines, or sectors working together to provide complementary services (Craven & Bland, 2006). The CCMHI further specifies that collaboration can involve increased communication, closer personal contacts, shared care, joint education, and joint program or system planning (Craven & Bland, 2006).

In practice, collaborative approaches to mental health care are dynamic (EICP, 2005; Paulter & Gagné, 2005; Schofield & Amodeo, 1999) and differ based on the providers included in a team, the degree of collaboration among these providers (Schmitt, 2001), the needs of a given population and individual client (Health Canada, 2004), the accessibility and setting of the services, and limitations resulting from funding. resources, and policies (Gagné, 2005). Consequently, there is a great deal of potential variability in the features of a given collaborative care team working in community mental health settings (Mulvale, Danner, & Pasic, 2008). For example, shared care is one collaborative care model that typically involves the co-location of psychiatry, counselling, and family medicine in a primary care setting (Haggarty, Klein, Chaudhuri, Boudreau, & McKinnon, 2008). Reverse shared care is another collaborative model that integrates primary care providers into a mental health setting (e.g., Ungar, Goldman, & Marcus, 2013). Additional terms such as multidisciplinary care and interdisciplinary care are also frequently used and imply different models of care. Multidisciplinary care is conceptualized as services provided by health professionals who work in parallel with one another, but with relatively little interaction (D'Amour, Ferrada-Videla, Rodriguez, & Beaulieu, 2005; Schofield & Amodeo, 1999; Skultety & Zeiss, 2006). The term interdisciplinary does not always imply that members of different health professions are involved, as there can be many disciplines within the same profession (e.g., medicine; Oandasan & Reeves, 2005). The term interprofessional care (IPC) is preferred, as it implies that members of different health professions are involved, and the suffix inter- additionally implies partnership and collaboration among professionals (Oandasan & Reeves, 2005).

There is not, however, a definitive definition of IPC that is consistently used in the literature (Perreault & Careau, 2012; Reeves et al., 2011; Schofield & Amodeo, 1999). In Canada, HFO (2007) defines IPC as "the provision of comprehensive health services to patients by multiple health caregivers, who work collaboratively to deliver quality care within and across settings" (p. 7). This conceptualization is consistent with others in the literature (e.g., Gunn, Diggens, Hegarty, & Blashki, 2006; Archer et al., 2012) and highlights the core features of IPC: the inclusion of multiple health professionals (a minimum of two) who engage in a high degree of collaboration in order to coordinate health services (HFO, 2007). Consequently, IPC teams may range from dyads (e.g., physician and psychologist) to larger teams featuring a range of allied health professions (e.g., occupational therapist, dietitian, social worker, etc.). Core competencies for interprofessional practice include understanding the role of each professional and facilitating open communication among professionals (Interprofessional Education Collaborative Expert Panel, 2011).

# EVIDENCE FOR IPC IN MENTAL HEALTH CARE

A growing body of literature supports the benefit of collaboration among mental health professionals; however, it has been difficult to establish an evidence base for collaborative care generally in community health settings (Burns, 2004), and to identify evidence that is specific to IPC (Reeves et al., 2011) due to the aforementioned variety of collaborative care models and the inconsistent use of terminology (Perreault &

Careau, 2012; Schofield & Amodeo, 1999). Nevertheless, research that has examined collaboration consistent with IPC in community mental health settings appears to support the potential benefit of IPC across various client populations and mental health difficulties. Several studies have investigated IPC consisting of dyads of health professionals. Family physician and psychiatrist dyads are associated with reduced mental health difficulties and improved general health and well-being (Vines et al., 2004) maintained at three-month and six-month follow-up (Haggarty et al., 2008). Randomized controlled trial (RCT) designs further support improved client outcomes for physician-psychiatrist dyads over treatment-as-usual (TAU), including reduced depressive symptoms, medication adherence, and client satisfaction (Katon et al., 1996; Katon et al., 1997). Psychiatrist-nurse dyads may also offer superior benefits compared to TAU for clients with serious mental illness (i.e., bipolar and psychotic disorders), including fewer weeks in affective episodes and mental health hospitalizations, as well as increased quality of life, social functioning, and client satisfaction (Bauer et al., 2006; Reilly et al., 2013). Finally, a dyad of physicians and care managers (i.e., paraprofessionals) was associated with greater client satisfaction, depressive symptom improvement, and quality of life relative to TAU, with maintained symptom reduction at 12-month follow-up (Richards et al., 2013).

Research examining larger IPC teams composed of multiple health professionals also indicates positive client outcomes. A Cochrane Review of RCTs comparing IPC to TAU found that IPC was associated with greater client satisfaction, quality of life, and decreased depressive and anxiety symptoms maintained at two-year follow-up (Archer et al., 2012). However, this review included a range of IPC team configurations and health professions, making it difficult to ascribe treatment outcomes to a specific IPC team structure or client population. Several studies have examined IPC teams in specific client populations and symptom presentations, notably older adults with depression. Older adults treated by an IPC team reported greater improvement in depressive symptoms maintained at 12-month and 24-month follow-up, relative to TAU (Skultety & Zeiss, 2006). Similarly, Lin et al. (2003) found that IPC teams were associated with greater improvement in older adults' depressive symptoms, pain, and associated functioning when compared to TAU. In addition, IPC teams have acted in a strictly consultative role for other providers, where older adults treated through this IPC model reported more depression-free days compared to TAU. A similar sample and IPC model reported faster improvement in depressive symptoms after three months of treatment and improved mental health status compared to TAU (Hedrick et al., 2003).

Despite growing support for IPC, there are gaps in the literature. As addressed, studies vary in the model of IPC examined (i.e., number of team members, professions represented, amount of collaboration), making it difficult to establish a consistent evidence base. Furthermore, additional research is needed to examine IPC for chronic mental disorders (Reilly et al., 2013) and for clients with comorbid somatic concerns. Pain is commonly comorbid with emotional disorders in outpatient settings and is associated with greater functional impairment (Kroenke et al., 1994). Consequently, IPC teams providing care for chronic and comorbid symptom presentations in community mental health settings have limited evidence to inform practice.

The purpose of this study is to investigate mental health outcomes for clients with chronic and comorbid mental health difficulties treated using IPC in a community mental health outpatient program. Given the comprehensive nature of treatment inherent in IPC, it was hypothesized that clients would report decreased difficulty with mental health symptoms and psychosocial functioning over the course of IPC, relative to a waitlist period, despite the severity of these clients' symptoms and affected functioning.

# **METHOD**

A naturalistic design examined the effectiveness of an IPC team working within a larger mental health outpatient program located in a mid-sized Canadian city. The outpatient program offered general mental health assessment and treatment services to clients, which included individual, group, or the IPC team treatment. Naturalistic designs are valued as a way to assess the effectiveness of interventions in everyday practice, and as a complement to tightly controlled RCTs by examining external validity (Westen, Novotny, & Thompson-Brenner, 2004). The research was approved by local research ethics boards.

# **Participants**

A retrospective cohort of clients treated by the IPC team between January 2005 and March 2012 were examined for their mental health and psychosocial functioning outcomes. Clients were eligible for IPC team treatment using the following criteria: aged 16 years or older, presented with a chronic or comorbid mental health problem, and had a family physician or nurse practitioner in the community in order to manage medication. Potential clients were excluded from IPC treatment if they were in need of emergency care (e.g., actively suicidal, acute psychosis) or intensive case management, or if the primary complaint required marital counselling. Participants provided consent and completed measures as part of a standardized process throughout the outpatient program.

# **IPC Intervention**

The IPC team was composed of a psychologist, social worker, recreational therapist, occupational therapist, dietitian, and nurse. These professions were chosen to align with a program goal of providing comprehensive treatment to improve clients' mental health symptoms and associated psychosocial functioning. Treatment typically consisted of one to three sessions per week for a period of three to six months, and was marked by the following sessions: intake, treatment planning, progress evaluation and goal review, and discharge. While clients were required to have a physician or nurse practitioner in the community, these clinicians were not part of the IPC team or the treatment which the team provided; however, the team sent updates to each client's physician or nurse practitioner throughout treatment.

**Intake.** Clients were initially referred to the larger mental health outpatient program by their family physician or nurse practitioner. All clients completed an initial intake assessment for the outpatient program in order to collect demographic information, assess for salient difficulties with mental health and psychosocial functioning, and review available treatment options. Clients were triaged to the IPC team if they reported chronic or comorbid pathology and were receptive to care provided using this treatment model. Clients treated by the IPC team attended an orientation session that outlined the IPC model and provided psychoeducation on the stages of change. Clients were asked to identify treatment goals for homework.

**Treatment planning.** Several weeks following intake, each client met individually with the IPC team to collaboratively develop a treatment plan based on concrete and measurable goals. The client and team identified the professions and services needed to facilitate goal attainment, and the team coordinated their services to provide a seamless and comprehensive intervention. Active treatment with the IPC team began following this session.

**Progress evaluation and goal review.** Following three months of IPC, each client met with the IPC team to evaluate treatment progress and adjust treatment goals as necessary. This process was consistent with McLoughlin and Geller's (2010) conceptualization of an active treatment plan as "an individually focused 'road-map,' meaningful to the client that allows all members of the team to evaluate the attainment of goals and the effectiveness of interventions, and modify them accordingly" (p. 263).

**Discharge.** Clients' progress and goal attainment was assessed again at six months to determine applicability for discharge. Discharge from the IPC team was based on the client's preference and perceived need for continued care from the IPC team.

#### Measures

Demographic and clinical information was collected from clients' intake forms, including age, sex, marital status, employment status, self-reported mental health concerns, past healthcare use for mental health issues in the 12 months prior to intake, and Global Assessment of Functioning (GAF) scores. Administrative data was used to identify the number of appointments with IPC team that clients attended and missed. Clients' mental health and psychosocial functioning was assessed at intake (T1), treatment planning (T2), and discharge (T3) using the Behavior and Symptom Identification Scale (BASIS-32; Eisen, Dill, & Grob, 1994). The BASIS-32 is a 32-item self-report measure of difficulty with psychiatric symptomatology and psychosocial functioning. Items are rated on a 5-point scale from 0 (*no difficulty*) to 4 (*extreme difficulty*) and are summed to produce a total scale score and five subscale scores, including Relation to Self/Others, Daily Living/Role Functioning, Depression/Anxiety, Impulsive/Addictive Behavior, and Psychosis. The BASIS-32 has been used extensively in mental health treatment programs across the world (Eisen & Speredelozzi, 2003) and has demonstrated adequate psychometric properties in outpatient samples (e.g., Eisen, Wilcox, Leff, Schaefer, & Culhane, 1999; Jerrell, 2005).

#### **Statistical Analyses**

Due to the hierarchical structure of the data (i.e., measurement occasions nested within clients) multilevel linear modelling was conducted using SPSS in order to investigate changes in BASIS-32 scores over time. Participants were conceptualized as random variables, permitting the possibility of greater covariation within participants than between participants; initial BASIS-32 scores were also permitted to vary by specifying the intercept as an additional random variable. Measurement occasion (T1, T2, T3) and BASIS-32 index (total scale and subscale scores) were entered as fixed variables (i.e., individual-level variables), with time (days) between T1-T2 and T2-T3 also entered as fixed variables. An interaction term was created between measurement occasion and BASIS-32 index to determine if any of the subscales demonstrated less change at T3 compared to the average total change. An autoregressive covariance structure was utilized along with maximum likelihood estimation. Missing values were estimated with the maximum likelihood solution.

#### RESULTS

## **Sample Characteristics**

Clients included 183 individuals (72 males; 111 females) ranging from 18 to 63 years of age (M = 42.17, SD = 11.16). At the time of intake, most clients were single (69%) and unemployed (79%). Clients presented with a variety of self-reported difficulties, most notably chronic pain (89%), depression (74%), anxiety (65%), and substance use (22%). Average GAF scores indicated serious symptoms and/or serious impairment in social, occupational, or school functioning (M = 45.84, SD = 9.70; American Psychiatric Association, 2000). Regarding healthcare use for mental health issues in the 12 months prior to intake, 14% of participants presented to the emergency department (M = 1.92, SD = 1.22), 13% used crisis response telephone services (M = 1.92, SD = 1.29), and 10% had been hospitalized due to mental health difficulties (M = 14.37, SD = 15.90, range: 1–60 days).

### **Treatment Outcomes**

Clients spent an average of 320 days (SD = 154.16) on the waitlist (i.e., intake until start of treatment). The average length of treatment was 278 days (SD = 197.35) during which time clients attended an average of 19 appointments (SD = 19.39) and missed an average of four appointments (SD = 4.27, range: 0–25).

Clients' BASIS-32 scores at each time of assessment are displayed in Figure 1, which suggests decreased symptom distress and psychosocial impairment over the course of treatment. At intake, approximately 76% of clients reported severe overall symptom distress and psychosocial impairment (i.e., BASIS-32 total t-score  $\geq$  70), which dropped to 67% during the pre-treatment waitlist period (intake to treatment planning). The greatest decrease was evident during the active intervention period (treatment planning to discharge), with 42% of clients reporting severe overall symptom distress and psychosocial impairment at discharge. Furthermore, 41.8% of clients demonstrated a decreased BASIS total score of 1 standard deviation or greater across the active intervention period, which has been conceptualized as clinically significant improvement (Wampold, 2001; Wise, 2004). A similar pattern was observed for the BASIS-32 subscales comprising this total score. More than half of the clients reported severe difficulty with Depression/Anxiety symptoms and psychosocial functioning (Relation to Self/Others, Daily Living/Role Functioning) at intake; here again the greatest change took place across the active intervention period, with less than half of the clients reporting severe difficulties in these domains at discharge.



Figure 1 Average BASIS-32 Total and Subscale Scores at Each Time of Assessment.

Table 1 shows estimates for the fixed and random parameters for the repeated measures multilevel model. During the waitlist period between intake (T1) and treatment planning (T2), clients' BASIS-32 scores did not significantly change; however, a significant change for the BASIS-32 total and all subscale scores occurred during the active intervention period between treatment planning (T2) and discharge (T3). As shown in Figure 1, compared to the waitlist period (T1-T2), scores on the BASIS-32 subscales of Relation to Self/Others, Daily Living/Role Functioning, Depression/Anxiety, and Psychosis improved significantly during the active treatment period (T2-T3). While scores on the Impulsive/Addictive Behavior subscale also improved during treatment, this was not significantly greater than the waitlist period (T1-T2). The total number of days between T1, T2, and T3 did not appear to influence treatment outcome.

As previously described, an interaction term was created (measurement occasion  $\times$  BASIS-32 index) to determine if any of the subscales demonstrated less change at T3 compared to the average total change. All of the subscales showed more change when contrasted with the BASIS-32 total scale.

Predictor Variables	Estimate	95% C.I.	SE	р
Fixed effects				
Intercept	76.74	71.55, 81.94	2.62	<.001
T2	-2.72	-5.59, 0.14	1.46	.063
Т3	-11.53	-14.38, -8.68	1.45	<.001
Total days T1-T2	.001	011, .013	.006	.837
Total days T2-T3	.002	008, .013	.005	.598
BASIS-32			1.46	
Relation to Self/Others	-9.89	-12.75, -7.04	1.46	<.001
Daily Living/Role Functioning	-4.35	-7.21, -1.49	1.46	.003
Depression/Anxiety	-4.01	-6.87, -1.15	1.46	.006
Impulsive/Addictive Behavior	3.24	.388, 6.10	1.46	.026
Psychosis	-8.49	-11.35, -5.63	1.46	<.001
T3 x Relation to Self/Others	3.00	-1.03, 7.02	2.05	.144
T3 x Daily Living/Role Functioning	2.80	-1.23, 6.83	2.05	.172
T3 x Depression/Anxiety	3.42	61, 7.45	2.05	.096
T3 x Impulsive/Addictive Behavior	-1.54	-5.57, 2.49	2.05	.454
T3 x Psychosis	1.25	-2.78, 5.28	2.05	.544
Random Effects				
Intercept	69.38	51.01, 94.38	10.89	<.001
Repeated Measures	99.67	92.99, 106.83	3.53	<.001

Table 1 **Multilevel Model for Clients' BASIS-32 Scores** 

*Note.* T1 = Intake; T2 = Treatment Planning; T3 = Discharge.

## DISCUSSION

Increased collaboration among health professionals may help meet the demands placed on healthcare resources (HFO, 2007; World Health Organization, 2010), which has coincided with increased uptake of IPC in mental health service settings. The purpose of this study was to examine treatment outcomes for outpatient clients with chronic and comorbid symptoms treated by an IPC team in a community mental health setting. The IPC team comprised a variety of professionals who engaged in a high degree of collaboration throughout clients' treatment. Using the subscales of the BASIS-32, clients reported significantly reduced difficulty with mental health symptoms (Depression/Anxiety, Psychosis) and psychosocial functioning (Daily Living/Role Functioning, Relation to Self/Others) over the course of treatment by the IPC team, relative to a waitlist period. Furthermore, a smaller proportion of clients reported severe difficulties with symptoms and psychosocial functioning associated with IPC, decreasing from 76% at intake to 42% at discharge. In addition, just under half of the clients reported clinically significant improvement in mental health symptoms and psychosocial functioning associated with IPC. These results suggest that IPC is associated with improved mental health symptoms and psychosocial functioning in adult outpatients. Given that the sample was clinically heterogeneous, with severe chronic and comorbid mental health difficulties, positive outcomes are particularly noteworthy. Qualitative reports from IPC team members indicated that clients who had been referred to the program typically had longstanding and severe symptom presentations; as such, many clients reported decreased symptom severity at discharge but continued to fall within the severe range.

This study used a naturalistic sample and consequently it represents the population presenting for community mental health services. Clients were predominantly single, unemployed, and reported high psychosocial difficulties at intake. All clients were followed by a family physician or nurse practitioner in the community who did not take part in the care provided by the IPC team. The average length of treatment was nine months and clients attended an average of 19 appointments.

This study has limitations that highlight directions for future research. The retrospective study design examined a single IPC team without randomization to a control group or active treatment comparison, which is necessary to examine the efficacy or relative effectiveness of IPC. The practice-based setting of data collection and the limited treatment resources available resulted in a convenience sample and the inability to randomize clients or delay treatment to a control group. While this is less ideal from a methodological standpoint, we demonstrated that clients reported significantly less difficulty with mental health symptoms and psychosocial functioning over the course of the active intervention period and not during the pre-treatment waitlist period. Given the naturalistic design used in this study, these findings provide support for the potential benefit of IPC in actual practice. Physicians and nurse practitioners were not included as members of the IPC team but followed clients' independently in the community; thus, it is possible that the care provided by these community professionals may have influenced client outcomes. Furthermore, clients' psychotropic medication use was not collected and could have influenced their response to IPC team treatment. Finally, as the sample consisted only of treatment completers, it was not possible to determine the no-show or dropout rate for clients in this IPC intervention. These shortcomings highlight the importance of rigorous research study designs to account for the many potential factors that could influence client outcomes from IPC. Regarding data collection, outcomes were tracked over approximately six years. During this time, IPC team member turnover and leaves of absence may have affected treatment fidelity. There was also no assessment of team functioning over the course of treatment, which could have conceivably affected the quality of care provided to various clients. Finally, the use of a single measure to assess clients' symptoms and psychosocial functioning may have failed to capture additional client change. Future research could consider alternative measures and multi-modal assessment to provide a broader range of information about clients' outcomes.

Innovative approaches to health service delivery are essential to sustainability (Kazdin & Blase, 2011). IPC entails the inclusion of multiple health professions to offer a comprehensive intervention for clients' psychosocial functioning difficulties, which may translate into long-term benefit and less need for repeated service access. Furthermore, the increased level of communication and coordination among professionals that is inherent in IPC may help to manage the costs associated with a more comprehensive intervention through decreased service overlap and need for future care (HFO, 2007; EICP, 2005). Where clients with chronic and comorbid mental health pathology often experience associated difficulties in a variety of psychosocial domains, the comprehensive care available through IPC may raise the overall quality of care provided while offering a sustainable model of service delivery. This may be especially true for clients with more severe and chronic mental disorders (e.g., schizophrenia, bipolar disorder), and for clients with comorbid somatic difficulties (e.g., chronic pain). IPC may also have a particular benefit in traditionally underserved settings, where there is often little to no access to mental health professions. One important consideration when using IPC is the expense associated with providing treatment; thus, future research should conduct cost-benefit analyses to determine if the cost of IPC truly results in longitudinal savings in healthcare usage, and in sustained improvement in clients' symptoms and quality of life. Finally, it would be beneficial to ascertain whether specific symptom presentations, levels of symptom severity, or even personality factors play a role in response to treatment via IPC in order to best optimize care.

# CONCLUSIONS

In summary, we examined treatment outcomes for adult clients with chronic and comorbid mental health difficulties treated by an IPC team in a community mental health outpatient program. Clients reported improved mental health symptoms and psychosocial functioning between pre- and post-intervention by the IPC team, providing initial support for the use of IPC in adult outpatient mental health care. Additional research is required in order to identify the efficacy and cost-benefit of IPC, notably in contrast to alternative models of care, and to examine whether the comprehensive care provided by IPC translates into longitudinal gains for clients experiencing significant mental health difficulties.

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