2019 Ontario Housing First Forum on Evidence-based Practices

SESSION: Housing First (HF) forum

Case management: Research Evidence on Housing outcome

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Time: 9am – 4pm (EST)
Ontario Housing First Regional Network Community of Interest (OHFRN-CoI)
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The Ontario Housing First Regional Network Community of Interest (OHFRN-COI) is intended to assist communities across Ontario to develop, evaluate, and improve Housing First (HF) programs based on the Pathways model tested, adapted, and shown to be effective in the At Home / Chez Soi Demonstration Project. For more information, visit http://eenet.ca/housing-first-community-of-interest/

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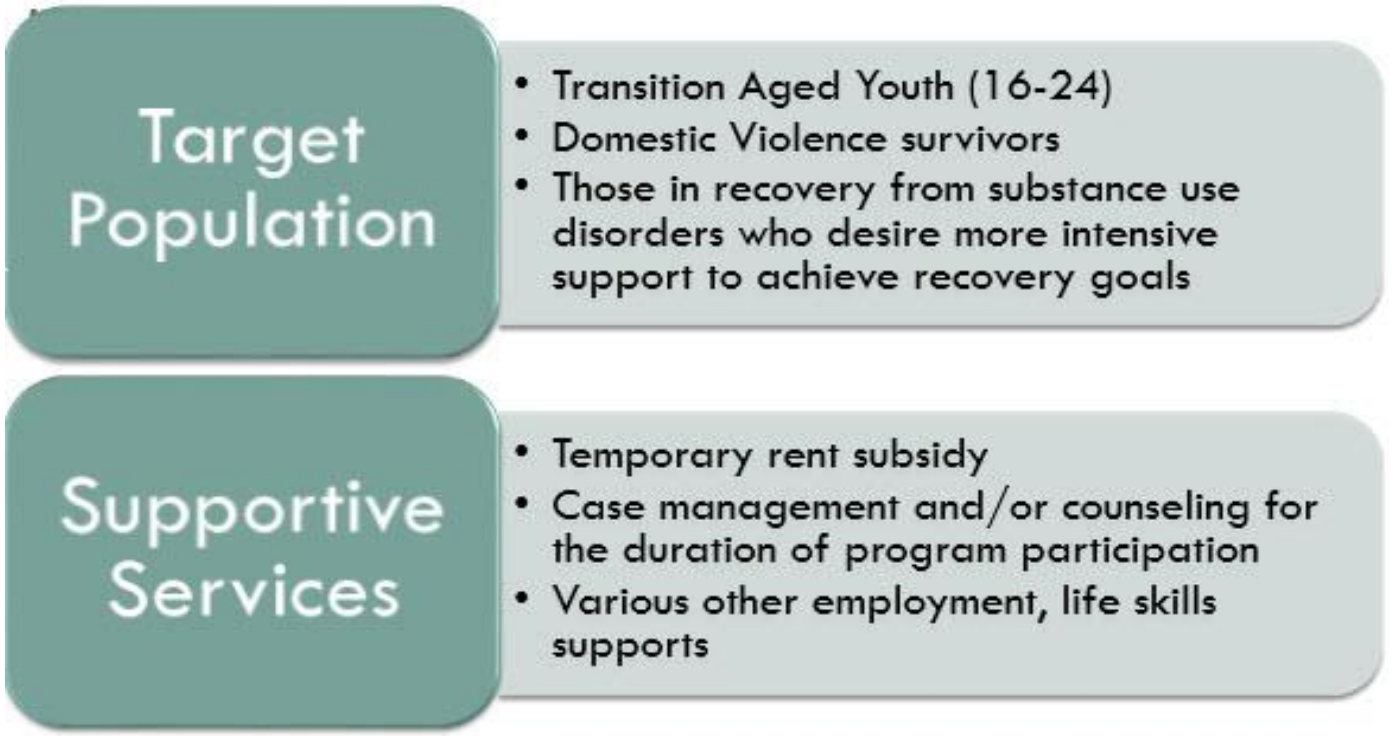
Background Intensive Case Management

- ICM is a team-based approach that supports individuals through a case management approach to helps clients maintain their housing.
- ICM helps individuals achieve an optimum quality of life through developing plans, enhancing life skills, addressing health /mental health needs and building social and community relations (Bender, Kapp & Hahn, 2011, Stegiopoulous et al., 2018).



Background – Assertive Community Treatment

ACT differs conceptually and empirically from traditional case management approaches because it provides a holistic approach to services which includes but not limited to helping with medications, housing, finances and everyday problems in living (Bond et al., 2001).

ACT - improve housing stability and cost-effective for those experiencing mental illness and concurrent disorders (de Vet et al. 2013), and can be useful in underserved people with complex support needs.

Background - Critical Time Intervention

- CTI is a time-limited, strengths-based case management intervention designed to support vulnerable people during transitions in their lives (Lako et al, 2018).
- CTI has a significant positive effect on family support, and for vulnerable persons experiencing less social support, psychological distress or trauma (de Vet et al. 2017; Pattoni, 2012).
- Hence, CTI offers a credible opportunity to improve housing stability, health outcomes, social functioning and quality of life for vulnerable populations during transitions from shelters to housing.

Methods

Key questions:

- Should homeless or vulnerably housed be offered Case Management (Intensive case management, Assertive community treatment, Critical Time Intervention) to improve their housing stability and quality of life?

Methods

1. Intensive Case Management (ICM) - 17 RCTs.

- **ICM vs Usual Care – 9 studies** across 10 publications - [Braucht 1996, Cox 1993, Cox 1998, Grace 2014, Korr 1996, Marshall 1995, Orwin 1994 (Study 3), Rosenblum 2002, Shern 2000, Toro 1997].
- **ICM vs CM – 2 RCTs** [Stahler, 1996; Cauce, 1994].
- **ICM vs other interventions – 5 RCTs** [Clark 2003; Burnam 1996; Felton 1995; Malte 2017; Schutt 2009].

2. Assertive Community Treatment (ACT) - 8 RCTs, and 2 controlled before-after studies.

- **ACT vs Usual Care – 5 RCTs** [Clark 2000, Fletcher 2008, Lehman 1997, Morse 1992, Morse 2006), and 1 follow-up study (Morse 2008].
- **ACT vs Standard Case Management (SCM) – 2 RCTs** [Essock 1998, Essock 2008].
- **ACT vs Brokered Case Management (BCM) - 1RCT** and one follow-up analysis [Morse 1997].

3. Critical Time Intervention (CTI) - 12 RCTs including controlled before-after studies.

- **CTI vs Usual Care/Service (UC)** – 10 RCTs [De Vet, 2017; Herman, 2001; Herman, 2011; Jones et al., 1994; Jones et al., 2003; Kasprow, 2007; Lennon, 2005; Susser, 1997; Tomita 2012; Tomita, 2015].
- **Family CTI vs UC**– 2 studies [Samuels 2015; Shinn 2015].

Is the problem a priority?

- 9.4 million Canadians with many homeless, live in housing which is below national standards (PHAC, 2018).
- Youth (13 – 24 years) make up 20% of the Canadian homeless population, with 60% of homeless youth experiencing more violence/ victimization than the general population (Gaetz et al. 2016).
- Women represent approximately 27.3% of Canada's homeless population, a significant contributor to hidden homelessness (Gaetz et al. 2016).
- People with mental illness make up to 30-35% of the homeless/vulnerably housed population in the context of poverty, disaffiliation, and personal vulnerability (To et al., 2016).
- About 20-25% of people experiencing homelessness suffer from concurrent disorders such as severe mental and substance use conditions (To et al., 2016).

- Intensive Case Management helps individuals maintain stable housing, and achieve an optimum quality of life (Bender, Kapp & Hahn, 2011, Stegiopoulous et al., 2018).
- ACT can be effective in underserved people with mental illness and complex support needs.
- CTI has a substantial protective effect on both homelessness and rehospitalisation

JUDGEMENT: [YES]

How substantial are the anticipated desirable effects of Intensive case management on Housing outcomes? (Benefits)

Housing outcome/sub outcomes

a. Number of days homeless - ICM vs UC or ICM vs CM (4 RCTs)

- ICM vs UC - Long-term participation in ICM programs significantly reduced the number of days homeless (SMD -0.22, 95%CI -0.40 to -0.03).
- ICM vs CM - Between baseline and 18-month follow-up, across groups, there were significant improvements ($p<0.05$) in stable housing and literal homelessness.

b. Number of residence moves – ICM vs UC – 1RCT (Grace 2014)

- For both treatment groups, the number of residential moves was significantly reduced ($p=0.0001$).
- At 12 months period, ICM group had fewer residence moves than UC mean (MD -0.40, 95% CI -0.79 to -0.012, $p=0.044$).
- However, this effect was not evident at 24 months.

- **Number of days in better accommodation** - 1 RCT (Marshall 1995)
  - Between ICM vs UC, there was not significant difference in the averaged number of days in better housing compared to control group at 14-month follow-up.
- **Time spent in community housing - 1** RCT (Shern 2000)
  - ICM “Choices” vs UC - both groups showed substantial decreases in the time spent on the streets, the rate of decline was approximately two times more in ICM group compared to the control group ($p<0.001$) (Shern 2000).
  - 1 RCT (Schutt 2009 - Trial #5, San Diego) Individuals in enhanced ICM/Section 8 group and who did not abuse substances were less likely to spend days in the shelter or on the streets ($p<0.05$) compared to control –(Section 8 rent vouchers and UC).

JUDGEMENT: [Small to Moderate]

How substantial are the desirable anticipated effects of Assertive Community Treatment on Housing outcome? (Benefits)

Housing outcomes /sub outcomes : 3 RCTs and one follow-up study.

a. Stable housing: ACT vs UC - Two RCTs and one follow-up study.

- In 2 studies, ACTO (Only)/ IACT (Integrated) groups achieved significantly higher staying rates ($P<0.01$) or or more days ($p=0.03$) in stable housing than UC group, respectively (Fletcher, 2008; Moose, 2006).
- ACT treatment group less likely to be homeless ($p<0.01$) after 12 months compared to out-patient and drop-in programs (Morse, 1997)
- There was no significant difference between those who experienced one episode of homelessness in both ACT and UC groups at 24 months follow-up (Clark, 2000).
- There was no significant difference in the number of "days in stable housing" between IACT and ACTO groups (Moose, 2006).
- At 12 /18 months, the anticipated desirable effects of ACT intervention was substantial with more rapid benefits than UC approach.

- **ACT vs ACT + community workers vs BCM -** 1 RCT (Morse, 1997).
  - ACT showed higher (P < 0.032) mean number of days in stable housing -23.70 (SD11.42) versus 18.98(SD 13.89) and 16.02(SD14.77) days for the ACT+ community workers and BCM groups, respectively.

- **Community Housing** - **ACT vs UC - 1** RCT (Lehman, 1997).
  - ACT group showed significantly higher number of days in community housing compared to UC in 12 month period.
  - Number of days homeless on the streets was only marginally different after 12 months between ACT and usual services (p=0.058) (Lehman, 1997).

JUDGEMENT: [Moderate]

How substantial are the desirable anticipated effects of Critical Time Interventions on Housing outcome? (Benefits)

Housing outcome/suboutcomes

a. Odds of homelessness - CTI vs UC - 1 RCT [Herman, 2011].

- There was a five-fold reduction in the odds of homelessness (after 18 weeks) compared to usual care only (OR=0.23; P= 0.034).
- At 18-month follow-up, odds of homelessness was reduced by 67% in the CTI group compared to UC (OR 0.28), but this was not statistically significant.

b. **Total number of homeless nights** – CTI vs UC - 3 RCTs [Herman, 2011; Jones, 1994; Susser, 1997].

- CTI participants had significantly lower number of homeless nights (1812) compared to control group participants (2403 homeless nights) over the 18-month follow-up period - (P<0.001) (Herman, 2011).
- Another RCT reported no significant differences between treatment groups when number of days homeless was assessed after 12-month follow up period (Kasprow, 2007).

c. Average number of homeless nights - Two studies – Jones, 1994; Susser 1997).

- Average number of homeless nights over the 18-month follow up was significantly (p=0.003) reduced e.g. CTI (30) vs control (91) in one study (Susser 1997);
- In another study reported CTI (45.8 nights) compared to UC (160.0 nights) (Jones, 1994).

d. **Number of non-homeless nights** - (One study –Jones, 2003).

- In CTI participants, non homeless nights were marked reduced by more than 58 nights ($P < 0.01$) compared to participants in the Usual care group.

e. **Mean number of days rehoused** – (2 RCTs).

- CTI clients had significantly more days rehoused at the six-, nine-, and 12-month follow up intervals (P =.02, P=.001, and P=.001, respectively) than in UC group (Kasprow, 2007).
- Another RCT (De Vet, 2017) Groups did not find any significant difference in the number of days rehoused either at 6-month and 9-month follow-up points.

- **F. Days until housed:**
  - 1 RCT (Samuels, 2015) - mothers referred for 9-month FCTI plus housing vs mothers receiving homeless services-as-usual, including permanent housing.
    - Average number of days until FCTI families rehoused was 91.25 days compared to 199.15 days for the control group.
    - There was a quick transition from shelter to housing.

- **g. Time spent in community housing** - FCTI vs UC
  - Study assessed children's mothers with diagnosed mental illness or substance problems.
    - At 3 and 6 month, FCTI group spent significantly more time in community housing 43% and 91% compared to 8% and 45% for the UC group.
    - FCTI services ended at 9 months, and housing patterns for treatment and control groups converged afterwards e.g. 15 – 24 months.
  - **Anticipated desirable effects of CTI/FCTI showed moderate benefits at 9 – 15 months compared to UC or services.**

JUDGEMENT: [Moderate]

How substantial are the undesirable anticipated effects? (Harms)

- Available literature did report on harms or adverse outcomes related to the interventions. However, evidence from grey literature identified minor negative impact of mental health interventions (ICM, ACT and CTI).
- **Mental health problems** were initially exacerbated, mostly in women and their children in shelters, but improved as they gained insight into their mental illness, and sense of control over their own lives (Holtschneider et al., 2017; McNaughton & McCay, 2016).
- **Transient nature of support workers** negatively impacts continuity of care or participants' ability to seek or utilize services (Archard et al., 2015; Holtschneider et al., 2016; Macnaughton et al., 2016).
- **Gender constructs** for men and women based on cultural beliefs, values, employment, and **family roles were** seen as limiting factors to accessing programs (Guilcher et al., 2016; Gultekin et al., 2014; McMaster et al., 2017).
- CTI has a relatively **short follow-up** period which may undermine potential positive long-term effects.
- The undesirable effects of interventions were trivial in nature when compared to the outcomes of the intervention.

JUDGEMENT: [Trivial]

Does the balance between desirable and undesirable effects favor the intervention?

- Evidence indicates that ICM has a protective effect on the odds homelessness by reducing the number of days homeless or spent in the streets, residential moves, alcohol use and emergency room visits.
- ICM and ACT improved stable housing or community housing which supports the model's effectiveness and demonstrating its applicability in vulnerable populations.
- Conversely, one three-arm trial - housing support group HSG saw a more significant decrease in emergency room visits per participant relative to a variant of ICM - intensive addiction/housing case management (IAHCM).
- Furthermore, limited follow-up and poor linkage with peer support groups after intervention may limit intended outcomes.
- No major harms were identified in the trial literature, and from grey literature. However, factors such as poor linkage and loss to follow-up during intervention may limit intended outcomes.

JUDGEMENT: [Probably Favours Intervention]

Does the balance between desirable and undesirable effects favor the intervention?

- CTI has a **substantial protective effect** on homelessness/ housing stability; an impact which persists up to nine months after the intervention ended (Tomita and Herman, 2012; Lako et al., 2018).
- However, limited follow up and poor linkage after intervention may limit intended outcomes.

JUDGEMENT: [**Favours Intervention]**

What would be the impact on health equity?

- ICM facilitates coordination of needed services of mental health services, Housing and social - support structures and services in response to the clients' varied and changing needs, improving access and reducing health inequities in homeless/ vulnerably housed youths.
- Transition from homelessness to stable housing and improves retention in health services in youths (Kaur et al.).
- CTI improves the health outcomes, social functioning and quality of life for vulnerable populations during transitions from shelters to housing.
- Evidence from RCTs and grey literature suggests ACT can be effective in underserved people with complex support needs and may play a role in reducing health inequities.
- Equity considerations around sex, gender and diversity can increase the impact of ACT interventions for persons or families experiencing homelessness (Rich and Clark 2005; Rivas et al., 2015).
- Applying a health equity lens to ICM/ ACT/ CTI may reduce avoidable and unfair health and social disparities experience by vulnerable, homeless and marginalised populations (Mathew & Mott et al.,2018).

JUDGEMENT:
[PROBABLY YES]

Is the intervention acceptable to key stakeholders?

- Evidence from qualitative grey literature on similar interventions (CERQual: low to very low confidence) suggests that ICM will be acceptable to youths experiencing Homelessness/Vulnerable housing due to its strengths-based approaches (Pattoni 2012).
- Generally, youths, in particular, value the need for stability, continuity and commitment by support workers.
- Youths view their case managers as a decisive factor contributing to their ability to access services by providing support, acceptance, connections to peer support and teaching them skills such as money management (Margood et al., Aviles et al., 2004; Farquhar et al., 2014).

Is the intervention feasible to implement?

Evidence from research indicates that ICM will be feasible to implement if

- delivered with higher fidelity to the model.
- explores integrated peer support potentials (Bender, Kapp & Hahn, 2011).
- ACT like other team based models has been implemented successfully in many Canadian jurisdictions.
- CTI appear feasible and cost-effective, and reduces homelessness, psychiatric symptoms, and psychiatric inpatient readmissions (Stergiopoulos et al., 2018).

JUDGEMENT: PROBABLY YES]

Implementation considerations

Heterogeneity of interventions - challenge to the fidelity of implementation.

considerations includes -

- Points of access.
- Eligibility Criteria.
- Use of peer support/ Lived expirence.
- Use Interdisciplinary teams and experienced service providers,
- Broad partnerships and collaboration among various service sectors.
- Training and team building activities.

Implementation considerations

Eligibility Criteria

What can be done for those who do not meet ACT criteria (ICM or FACT).

Lessons from HF operations include use of a broader provincial criteria for ACT eligibility

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