Critical Time Intervention for Homeless People Making the Transition to Community Living:

A Randomized Controlled Trial

Appendix S1: Selection of shelters as recruitment sites

Shelters were eligible for selection as recruitment sites if they provided short-term residential services (i.e., 24-hour services for a period generally no longer than 12 months) to at least 50 adult clients per year and expected to continue these services over the next 5 years. Out of the shelters matching these criteria and willing to participate, we selected nine which were distributed evenly among the Netherlands. Recruitment started December 1, 2010. Because after 6 months recruitment was lagging behind, we decided to add another 13 shelters as recruitment sites in 2011. Several of these additional recruitment sites did not meet our original selection criteria. Nine of them were small facilities who served fewer than 50 adult clients per year, three shelters also offered long-term services (for a period longer than 12 months) depending on clients' services needs, and one shelter would probably be closed in the next 5 years. Eventually, 22 shelters for homeless people (run by nine organizations) participated in the study.

Including additional shelters as recruitment sites did not affect the findings of the present study, insofar as can be ascertained. The shelters which served fewer than 50 adult clients per year had a similar target population as the larger facilities included earlier. A disadvantage of including these smaller shelters was that the potential for participant recruitment was also small. As a result, we were unable to find any clients that were able and willing to participate in four of these facilities. Three of the shelters that were included later on also offered long-term services. Seeing that one of the selection criteria for participants was that did not stay at the shelter for more than 14 months, our sample continued to consist of homeless people with relatively short-term shelter stay. Lastly, one shelter did not expect to

continue its services over the next 5 years. We were able to recruit a couple of participants in this shelter before it merged with one of the larger facilities that already took part in the study.

Appendix S2: Key components and process measures

According to the CTI fidelity scale manual (Conover, 2012), the 14 key components of CTI are:

- 1) small caseloads, composed exclusively of CTI clients
- 2) a time-limited, 9-month intervention
- 3) decreasing intensity of services
- 4) three distinct treatment phases
- 5) in vivo (i.e., community-based) needs assessment and provision of services
- 6) early establishment of community linkages
- 7) a focus on one to three areas that put client at risk for homelessness, selected from the six CTI areas
- 8) strengthening of community linkages through negotiation and mediation
- 9) worker availability to clients and providers from the field
- 10) worker-client relationship characterized by social solidarity
- maintaining contact with clients with histories of transience, in order to minimize drop-outs
- 12) a harm-reduction approach to behavior change
- 13) regular team supervision meetings and frequent case review for every CTI client
- organizational advocacy, basic staffing and resources, structural flexibility for theCTI program

Appendix S3: Outcomes omitted from this report

Which outcomes to include was decided in consultation with all authors before statistical analysis began. Four outcomes that were outlined in the study protocol have been

omitted from this report: loneliness, service use, working alliance between participants and CTI workers or case managers, and experiences with shelter and community care services (Lako et al., 2013). Reasons for restricting the number of outcomes were to reduce the conceptual overlap between several of the outcome measures and to minimize potential bias resulting from a relatively high amount of missing data on some variables. Findings of previous trials focusing on similar target groups were also considered to identify the most important outcome measures.

Loneliness, which was measured at baseline and 9-month follow-up with the De Jong Gierveld & Kamphuis Loneliness Scale (de Jong-Gierveld & Kamphuis, 1985), overlapped conceptually with family and social support. Because CTI aims to strengthen links with support resources, we expected these measures of family and social support to be more sensitive to intervention effects than the multidimensional construct of loneliness (DiTommaso & Spinner, 1997).

Service use overlapped conceptually with unmet care needs, although the latter construct is more subjective in nature. Service use was measured at baseline and 9-month follow-up with a self-constructed instrument used in several previous studies conducted by the Netherlands Center for Social Care Research (Impuls). Participants were asked to indicate whether they had used the services of certain care providers (e.g., general practitioner, dentist, social services) in the past 9 months and in the past 30 days. Unfortunately, this instrument was not properly incorporated in the questionnaire. As a result, participants who did not provide a response could not be distinguished from those who did not use a specific service, which made it impossible to ascertain the amount or pattern of missing data.

Working alliance between participants and CTI workers or case managers was measured with the short version of the Working Alliance Inventory (Horvath & Greenberg, 1986). This instrument was only administered to those who indicated receiving services from

a shelter organization at the 9-month follow-up. Seeing that fewer participants allocated to care-as-usual were still in touch with their case manger at 9 months, substantially more observations were missing from the control group, which could lead to biased estimates.

Participants' experiences with shelter and community care services were evaluated with the Consumer Quality Index for Shelter and Community Care Services (Beijersbergen et al., 2015). This self-report instrument was not administered by the interviewer, but could be completed by the participant after the interview had ended and returned to the research team with a prepaid envelope. This method of administration resulted in a relatively high non-response rate. Because of the missing data and the conceptual overlap between this instrument, the process measures, and the outcome measure of unmet care needs, we decided not to include experiences with shelter and community care services as an outcome in this report.

Statistical analyses with the omitted outcomes were performed in the same manner as detailed in the present report. Results of these analyses were reported to the funding bodies and can be provided upon request.

Appendix S4: Number of clients per CTI worker or case manager

Table 1
CTI Workers or Case Managers in Each Group and Number of Clients Assigned

		Case
Characteristic	CTI worker	manager
Number of CTI workers or case managers	24	60
Mean number of clients (SD) per CTI worker or case manager	3.6 (2.2)	1.3 (0.6)
Median number of clients per CTI worker or case manager	3	1
Range of number of clients per CTI worker or case manager	1–9	1–4

Note. Of the 183 participants, 6 participants in the CTI group and 14 participants in the control group did not receive any (case management) services from a shelter organization during follow-up.

Additional references

- Beijersbergen, M. D., Asmoredjo, J. K., Christians, M. G. M., & Wolf, J. R. L. M. (2015).

 Psychometric properties of the consumer quality index to assess shelter and community care services. *European Journal of Public Health*, 25, 378–384. doi: 10.1093/eurpub/cku195
- de Jong-Gierveld, J., & Kamphuis, F. (1985). The development of a Rasch-type loneliness scale. *Applied Psychological Measurement*, *9*, 289–299. doi: 10.1177/014662168500900307
- DiTommaso, E., & Spinner, B. (1997). Social and emotional loneliness: A re-examination of Weiss' typology of loneliness. *Personality and Individual Differences*, 22, 417–427. doi: 10.1016/S0191-8869(96)00204-8
- Horvath, A. O., & Greenberg, L. S. (1986). The development of the working alliance inventory. In L. S. Greenberg, & W. M. Pinsof (Eds.), *The psychotherapeutic process:*A research handbook (pp. 529–556). New York, NY: Guilford Press.