Supplemental material

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Online Supplemental File 3: Detailed Descriptions of Study Instruments

Instrument	Description
EQ-5D-3L and VAS	The EQ-5D-3L is a generic measure of health-related quality of life that has been widely used among the homeless population. The EQ-5D-3L includes five three-level items concerning mobility, self-care, usual activities, pain/discomfort, and anxiety/depression that are weighted to produce a single utility score between 0 and 1. The Visual Analogue Scale (VAS) of the EQ-5D-3L will also be included, which will allow participants to rate their overall health, mental health, and physical health from 0 to 100. References: 1. Janssen, M. F., Pickard, A. S., Golicki, D., Gudex, C., Niewada, M., Scalone, L., ... & Busschbach, J. (2013). Measurement properties of the EQ-5D-5L compared to the EQ-5D-3L across eight patient groups: a multi-country study. *Quality of life research*, *22*(7), 1717-1727. 2. Stergiopoulos, V., Hwang, S. W., Gozdzik, A., Nisenbaum, R., Latimer, E., Rabouin, D., ... & At Home/Chez Soi Investigators. (2015). Effect of scattered-site housing using rent supplements and intensive case management on housing stability among homeless adults with mental illness: a randomized trial. *JAMA*, *313*(9), 905-915.
MMAS-8	The MMAS-8 is a validated self-reported measure for medication-taking behavior that has been used among disadvantaged patients and those with chronic illnesses. The MMAS-8 consists of eight items, the first seven of which are yes/no questions, and the last of which is a five-point Likert-scale rating. Each ''no'' response is rated as ''1'' and each ''yes'' is rated as ''0'' except for item 5, in which each ''yes'' is rated as ''1'' and each ''no'' is rated as ''0''. For item 8, if a patient chooses response ''0'', the score is ''1'' and if they choose response ''4'', the score is ''0''. Responses ''1, 2, 3'' are respectively rated as ''0.25, 0.75, 0.75''. Total MMAS-8 scores can range from 0 to 8 and are categorized into three levels of adherence: high adherence (score = 8), medium adherence (score of 6 to 8), and low adherence (score < 6). References: 1. Moon, S. J., Lee, W. Y., Hwang, J. S., Hong, Y. P., & Morisky, D. E. (2017). Accuracy of a screening tool for medication adherence: A systematic review and meta-analysis of the Morisky Medication Adherence Scale-8. *PloS one*, *12*(11), e0187139. 2. Feehan, M., Morrison, M. A., Tak, C., Morisky, D. E., DeAngelis, M. M., & Munger, M. A. (2017). Factors predicting self-reported medication low adherence in a large sample of adults in the US general population: a cross-sectional study. *BMJ open*, *7*(6), e014435.

CTM-3	The most widely used measure of care transition quality is the Care Transition Measure (CTM). The CTM-3 is an abbreviated version of the original CTM-15, which measures the extent to which the healthcare team accomplished essential care processes in preparing the patient for discharge and participating in post-hospital self-care activities. The CTM-3 consists of three items with a four-point scale with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (4) to the following questions: 3. During this hospital stay, staff took my preferences into account in deciding what my healthcare needs would be when I left. 4. When I left the hospital, I had a good understanding of the things I was responsible for in managing my health. 5. When I left the hospital, I clearly understood the purpose for taking each of my medications Items are scored by summing the responses and then linear transforming to a 0-100 range. References: 1. Parry, C., Mahoney, E., Chalmers, S. A., & Coleman, E. A. (2008). Assessing the quality of transitional care: further applications of the care transitions measure. *Medical care*, 317-322. 2. Coleman, E. A., Smith, J. D., Frank, J. C., Eilertsen, T. B., Thiare, J. N., & Kramer, A. M. (2002). Development and testing of a measure designed to assess the quality of care transitions. *International journal of integrated care*, 2.
RAND Course of Homelessness Scale	Developed specifically for homeless populations, the RAND scale is a five-item index of self-reported difficulty in meeting the following subsistence needs over the past 30 days: frequency of difficulty in finding shelter, enough to eat, clothing, a place to wash, and a place to use the bathroom. Possible responses to each item are never (1), rarely (2), sometimes (3), or usually (4) with total scores between 5-20. Reference: 1. Gelberg, L., Gallagher, T. C., Andersen, R. M., & Koegel, P. (1997). Competing priorities as a barrier to medical care among homeless adults in Los Angeles. *American journal of public health*, 87(2), 217-220.