Web-assisted Training in Contingency Management: A Customizable Yet Scalable Product for Multi-Tiered Personnel in Addiction Treatment Settings

Bryan Hartzler PhD, Meg Brunner MLIS, Dennis M. Donovan PhD., Beatriz Carlini PhD, MPH, & Denna Vandersloot, MEd

Alcohol & Drug Abuse Institute, University of Washington; Northwest Addiction Technology Transfer Center

Introduction

Contingency management (CM) applies operant conditioning principles to reinforce treatment adherence, with central tenets that: 1) desired client behaviors be monitored, 2) a tangible reinforcer be provided after the behavior occurs, and 3) the reinforcer be withheld when the behavior does not occur. Despite 200+ efficacy trials and meta-analytic report of reliable effects across CM methods (Beneshek et.al, 2014; Lussier et al., 2006), adoption interest by addiction treatment settings has been slow to develop. Among the reasons for this is the limited availability of training resources, for which a web-assisted product will offer greater accessibility and reach within the broader addiction treatment community.

A training product may foster success in community implementation by attending to pre-implementation needs unique to treatment settings' multi-tiered personnel. For a given setting, this includes enabling its leaders to design CM programming customized to its needs and resources, building communication-based CM skills among direct-care staff to deliver such programming to their clients, and preparing clinical supervisors to perform monitoring and evaluative duties to govern implementation of customized CM programming. Informed by implementation science concepts and empirical findings of a community-based implementation trial (Hartzler et.al, 2014), such a web-assisted CM training is being developed. Herein we describe product development processes, as well as plans of the Northwest Addiction Technology Transfer Center (NWATTC) to make the product freely-available to the public via the national ATTC network.

CM Training Content

Guided by instructional design principles, the construction of a prototype included organization of training material into a modular structure with specific content for addiction treatment personnel in three strata. These personnel tiers were: 1) decision-makers, 2) clinical supervisors, and 3) direct-care staff. The modular structure for this training product is described below, and further illustrated in Figure 1.

A 90-minute 'Decision-Maker' module offers orientation to core CM principles and practices, discusses a range of implementation considerations, and concludes with a guided process whereby setting leaders can customize CM programming for the setting. A 3-hour, two-part 'Direct-Care Staff' module opens with an orientation to CM principles/practices and information to enhance adoption readiness, followed by a knowledge quiz for which a report is generated as internal setting documentation. Its latter section is reviewed in pairs, with sequences of modeling demonstrations and dyadic role-play exercises to cull skills in the communication-focused aspects of delivering CM programming to patients. A 3-hour, two-part 'Clinical Supervisor' module likewise offers orientation to CM principles/practices and information to enhance adoption readiness. It then provides a comprehensive resource toolkit for program evaluation and fidelity-monitoring, including a catalog of remedial activities to be used as needed with staff supervisees.

Figure 1. Modular Training Structure For Addiction Treatment Personnel

1½ hour duration
Orientation to core CM principles and practices
Testimonial remarks from setting leaders in the field
Review of implementation considerations
Guided process to customize CM program to setting

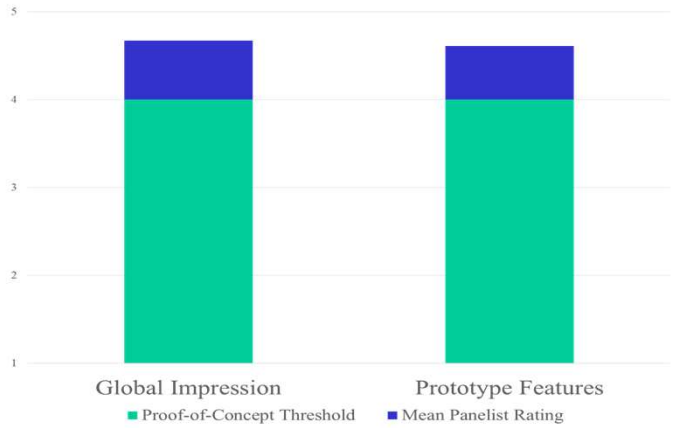
3 hour duration
Orientation to core CM principles and practices
Testimonial remarks from supervisors in the field
Program evaluation and fidelity-monitoring resources
Catalog of skill-building exercises for staff supervision

3 hour duration
Orientation to core CM principles and practices
Testimonial remarks from staff in the field
Quiz with score report to document completion
Modeling demonstrations and dyadic role-play exercises

Determination of Proof-of-Concept

A panel of content experts reviewed the prototype, offering qualitative and quantitative feedback via a survey containing items with open-response format or five-point numeric ratings. This included a single item eliciting a global impression of the prototype (1 = Terrible, 5 = Wonderful), and 33 rating items (1 = Strongly Disagree, 5 = Strongly Agree) concerning its specific features. The two *a priori* thresholds to signify proof-of-concept were: 1) global rating by all panelists of no less than 4; and 2) mean panelist feature ratings of 4.00 or greater. Both thresholds were exceeded. All panelist global impression ratings corresponded to 'Very Good' or 'Wonderful,' and an aggregate mean of their ratings across prototype features (M=4.61, SD=.19) was 3+ standard deviations above the threshold, as illustrated in Figure 2.

Figure 2. Mean Panel Ratings



Plans for Product Finalization

Qualitative panelist feedback is now guiding product finalization. This included praise of the prototype's modular structure for the multi-tiered staff of addiction treatment settings, promotion of customizable CM programming, thoroughness of conceptual presentations, and utility of supervisory resources and clinical skill demonstrations. An ongoing process of product finalization is integrating field expert suggestions to add testimonials from the addiction treatment community and update select terminology. Our multidisciplinary NWATTC team—with professional backgrounds spanning the fields of clinical psychology, public health, social work, education, and library and information science—will also then create a dissemination plan to foster dissemination of the final product. This will include its marketing via NWATTC to its regional constituents, as well as sharing it with other regional ATTCs, for whom it will be freely available amongst the wealth of online continuing education resources maintained by the national ATTC network on its HealthEKnowledge website.

In accord with the growing ATTC network emphasis on supplementing training resources with technical assistance to facilitate implementation of evidence-based practices, the NWATTC expects to avail systems change consultation to assist efforts to implement CM programming in its region. We hope this product may serve as a helpful complement to the existing suite of CM-focused NIDA Blending Products (i.e., PAMI, MI-Presto; (*https//:www.drugabuse.gov*) to support broad dissemination of this extensively-evaluated and empirically supported clinical method.

Acknowledgements

The initial work of developing this web-assisted CM training prototype was previously supported by K23 DA025678, *Integrating Behavioral Interventions in Substance Abuse Treatment.* Current efforts to finalize the product are supported by H79TI080201, *Northwest Addiction Technology Transfer Center*. The authors wish to thank the panelists who provided valuable feedback on the initial prototype, and leadership and staff of Evergreen Treatment Services with whom Dr. Hartzler previously collaborated on the CM implementation trial that informed creation of this web-assisted product.