





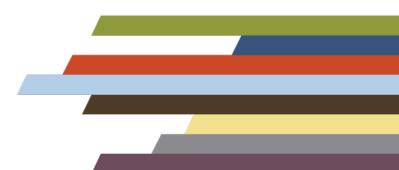
Northwest ATTC presents:

Implementing Contingency Management: The Case for Customizing to Your Setting Needs

Thank you for joining us! The webinar will begin shortly.

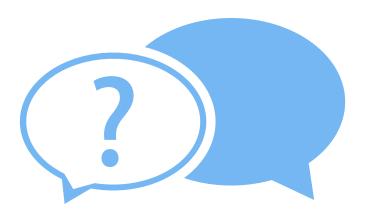
- **Got questions?** Type them into the chat box at any time and they will be answered at the end of the presentation.
- An ADA-compliant recording of this presentation will be made available on our website at: http://attcnetwork.org/northwest



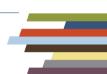




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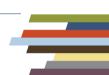
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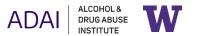


Implementing Contingency Management The Case for Customizing to Your Setting

Bryan Hartzler, PhD.

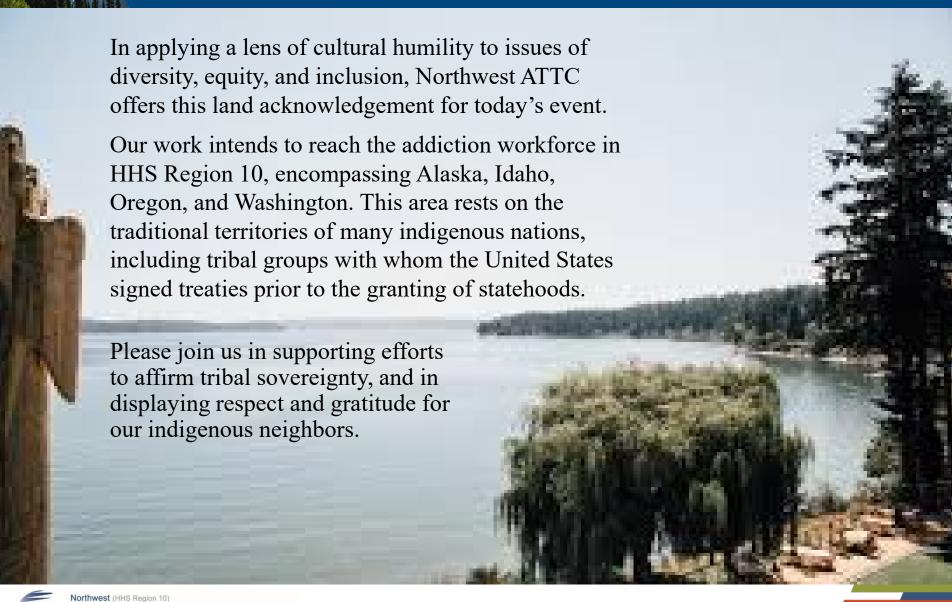
Northwest ATTC Webinar Series

November 18th, 2020





Regional Land Acknowledgement





What is Contingency Management (CM)?

Something you may already be applying, or have had applied to you...







CM Defined...

"Contingency management refers to a type of behavioral therapy in which individuals are 'reinforced', or rewarded, for evidence of positive behavioral change."



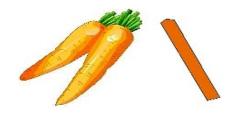
Source: Petry, 2011





Origins

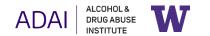
 Originated from agrarian notions of the 'carrot and stick' as motivational tools*



- Emerged in opioid treatment programs in 1970s, with take-home medication doses as reinforcers for substance abstinence
- Proliferated into a half-century of scientific testing of diverse applications for treatment adherence in addiction settings

*Source: Thorndyke effect, 1898



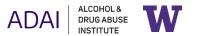


Lost In Translation....

Seemingly simple concepts can at times be misapplied

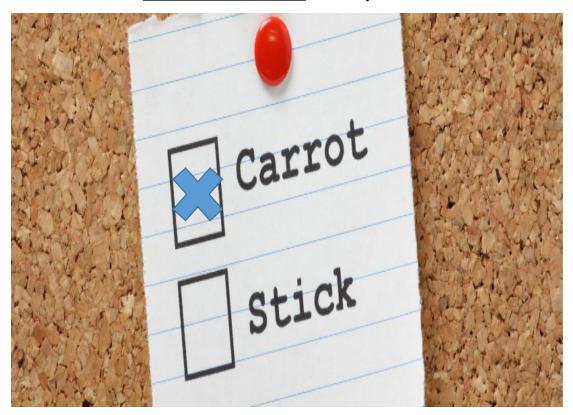






Let's Stick With The Carrot...

Contemporary CM applications focus on use of <u>reinforcement</u>, not punishment.







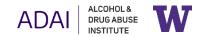
A Family of CM Approaches

Three core tenets common to all CM approaches:

- #1 A desired, and observable, treatment-adherent client behavior is targeted
- #2 A tangible reinforcer is provided whenever the client demonstrates the target behavior
- #3 If the client does not demonstrate the target behavior, the reinforcer is withheld

Source: Petry, 2012





CM Through the Years

1960s

Operant conditioning principles 1st applied to substance behavior in animals

1970s

Operant conditioning principles 1st applied to humans in studies with patients enrolled at methadone clinics

1980s

CM studies begin to test voucher-based protocols, particularly with persons who use stimulants

1990s

Proliferation of CM studies to diversify the targeted patients and behaviors, the reinforcers to be earned, and the systems of reinforcement.

2000s

Design of prize-based ('fishbowl') CM method. studies of costand clinical effectiveness. barriers to dissemination documented via surveys of workforce

2010s

Implementation studies and efforts for CM to test training methods and strategies to overcome the identified barriers to community dissemination.





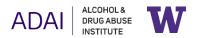


Harvesting A Half-Century of Science

- Availability of 648 unique publications describing application of CM programming in addiction treatment settings
- Efficacy for improving treatment adherence among persons with substance use disorders evidenced via 200+ published trials
- Design of procedurally-diverse CM protocols, most often utilizing setting privileges, vouchers, and prizes as reinforcers
- Absence of moderating influences among a set of demographic and economic patient background attributes
- Documentation of limited awareness or intentions to adopt within the addiction treatment community

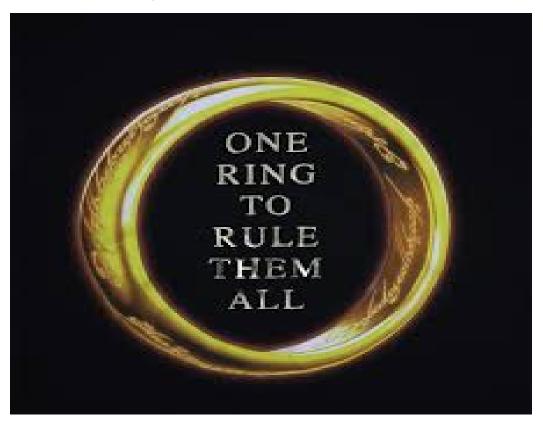
Sources: Forster et.al, 2019; Hartzler et.al, 2012; Hartzler et.al, 2010; Olmstead et.al, 2012





Why Not Greater Community Dissemination?

Nirvana Fallacy – presumption of one perfect solution



Source: Demsetz, 1969

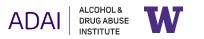




A View From 30,000 Feet...







A Half-Century of CM Effectiveness Data

Mean Effect Sizes of Varied CM Protocols

__0.80 Large

__0.50 Medium

0.20 Small

0.00

Prize-Based CM

 $d_{\text{mean}} = .46$

N=19 trials

Privilege-Based CM

 $d_{\text{mean}} = .52$

N=30 trials

Voucher-Based CM

 $d_{\text{mean}} = .68$

N=30 trials

Sources: Benishek et.al, 2014; Griffith et.al, 2000; Lussier et.al, 2006



The Glass is Half-Full, Right?

Based on the collective scientific work that has been conducted on CM, there are reasons for optimism.







What May Promote Wider CM Dissemination?

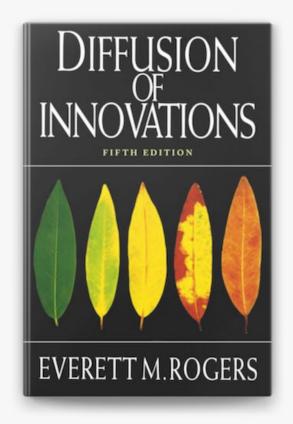
How can we make CM programming more.....?



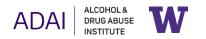




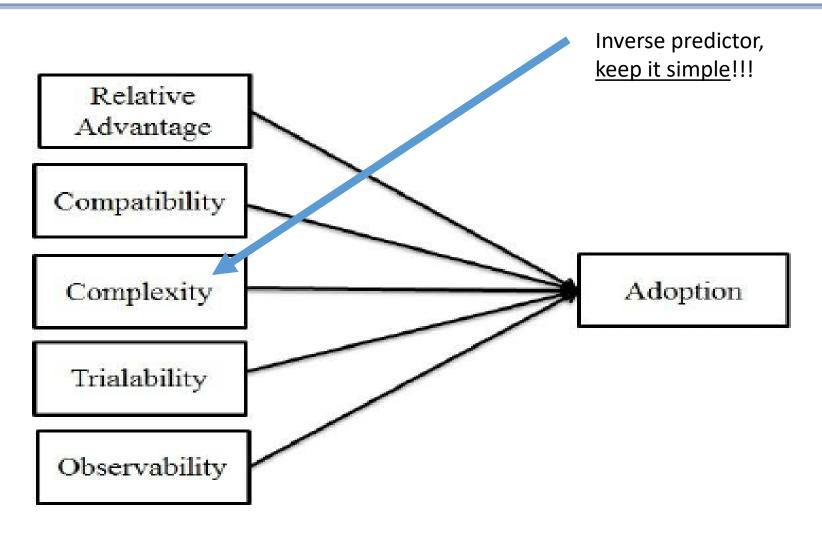
Wait a second, some of this sounds familiar...







Diffusion of Innovations



Source: Rogers, 2003





The Times, They Are (Still) a-Changing...

Sources of continual change for the treatment community:

- Staffing/Turnover
- Professional Requirements/Initiatives
- Availability of New Treatments
- Funding Streams
- Policy*
- And, in 2020, to boot there emerged a global pandemic...





Current Federal Policy Constraint

The Health and Human Services Office of the Inspector General, under the Trump Administration, restricts the value of reinforcers a patient can earn, as follows:

"Currently, only \$75 a year is allowed per patient, whether the payer is Medicaid or a SOR grant."





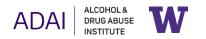


What May Promote Wider CM Dissemination?

Settings need to be able to customize CM programming to their needs and resources, and be poised to adapt that CM programming to perpetually changing circumstances.



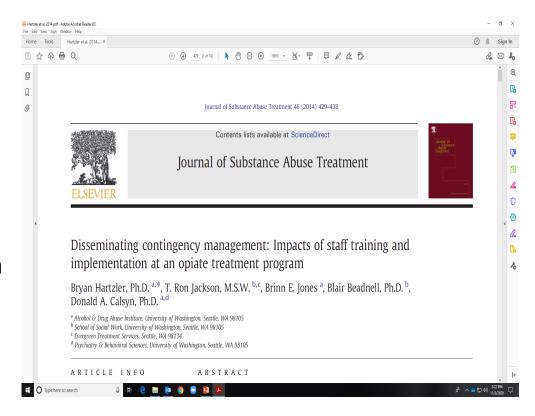




A Case Example

A single-site, Type III effectiveness/implementation hybrid trial was conducted at an urban opioid treatment program.

- Census of 1500+, monthly enrollment ~30 new patients
- Difficulty engaging their new patients in weekly counseling
- 23 direct-care staff members, of multidisciplinary composition
- Enthusiasm for other EBPs, but hesitant about CM



Source: Hartzler et.al, 2014





Salient Trial Design Features

- CM programming customized to the setting, based on its needs and resources, via a collaborative intervention design process
- Designation of local team of 'CM implementation champions' with whom purveyor recurrently met to address systems issues
- CM training provided for all direct-care staff, as four ½ day workshops occurring on-site over four weeks, with emphasis on skill development
- Development of an on-site 'CM library,' encompassing copies of all training materials including recorded training sessions





Salient Trial Design Features

- Designation of a 90-day period of provisional implementation to occur soon after conclusion of training
- Ongoing purveyor availability for consultation for all staff, including the 'CM champions,' clinical supervisors, and nonclinical staff
- Clinical effectiveness determined via independent chart review,
 with comparison to matched historical control patients
- Focus group at trial conclusion with leadership and 'CM champions' to discuss setting experiences and the prospect of sustainment





Collaborative Intervention Design

Shared design responsibility amongst a therapy purveyor and partnering treatment organization, enabling the resulting intervention to be both theoretically-informed and matched to the setting's fiscal and logistical implementation capacities.*

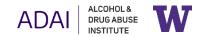
This is conceptually consistent with principles of:

- User-Centered Product Design
- Collaborative Intervention Planning Framework
- Community-Based Participatory Research
- Dynamic Sustainability Framework



*Sources: Hartzler et.al, 2014, 2015; 2016





Dynamic Sustainability Framework (DSF)

	Traditional View	DSF View
Adaptation	Bad; avoided/eliminated	Inevitable; encouraged, monitored and guided by evidence
Context assessment	Initial or during implementation	Ongoing
Outcomes assessment	During study by researchers	Incorporated as part of organization
Review of evidence	Initial- from efficacy studies	Ongoing; from convergent sources including replications
Staffing issues (<i>e.g.</i> , turnover) and variations	Ignored/feared	Planned for; investigated
Generates new knowledge	No	Yes, feedback to other areas of science and to earlier stages

Source: Chambers, Glasgow, & Stange, 2013





Dimensions of CM Programming

<u>Target Population</u> – new enrollees in 1st 90 days of services

<u>Target Behavior</u> – attendance of weekly counseling visits

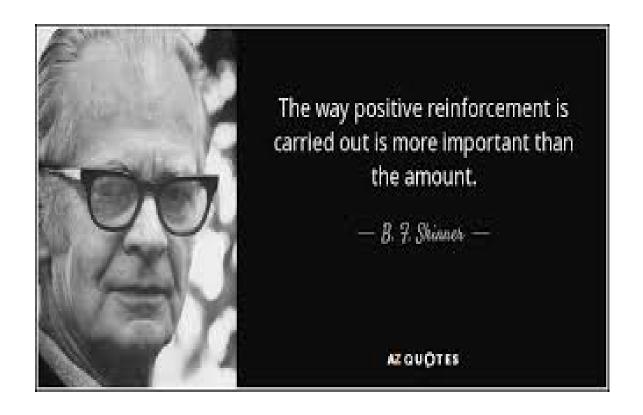
Reinforcers – \$10 gift cards, single-use take-home doses

Reinforcement System – 'point-system' akin to a token economy, incorporating priming and escalation features





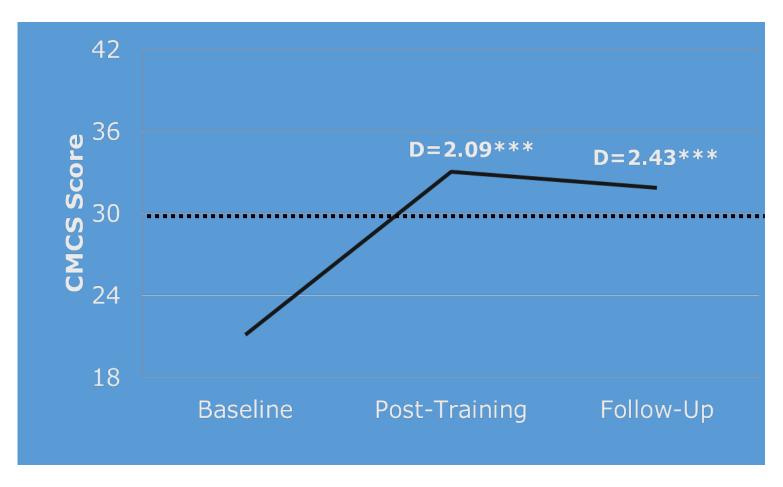
Fidelity Matters







Impacts of Training on CM Delivery Skills



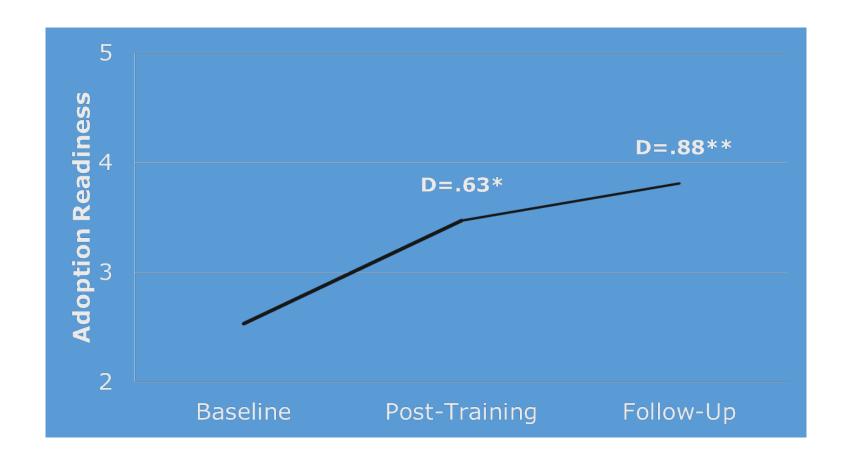
···· Skills-based Competency Threshold

***p<.001





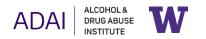
Impacts of Training on CM Adoption



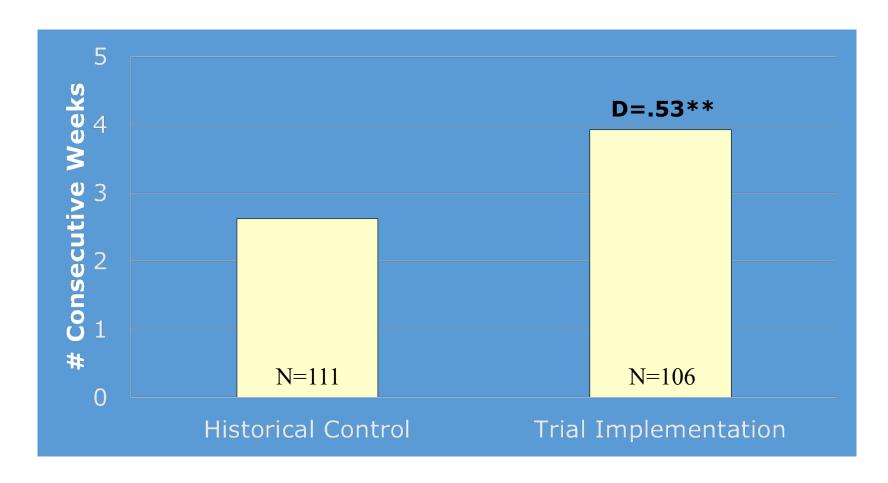
90-day staff penetration = 100%

**p<.01, p<.05





Was the CM Programming Effective?



16% Increase in Overall Counseling Attendance

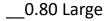
**p<.01





How Does that Compare, from 30,000 Feet?

Mean Effect Sizes of Varied CM Protocols



__0.50 Medium

__0.20 Small

0.00

Prize-Based CM

 $d_{\text{mean}} = .46$

N=19 trials

Privilege-Based CM

 $d_{\text{mean}} = .52$

N=30 trials

Collaboratively -Designed CM

d = .53

N=1 trial

Voucher-Based CM

 $d_{\text{mean}} = .68$

N=30 trials

Sources: Benishek et.al, 2014; Griffith et.al, 2000; Hartzler et.al, 2014; Lussier et.al, 2006

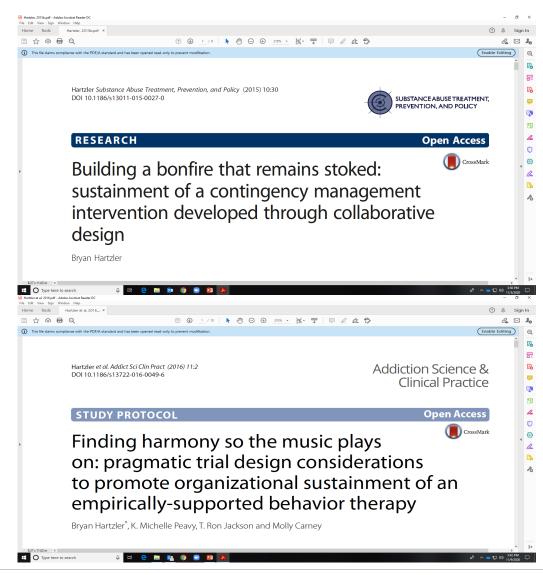




What Happened Next?

- OTP leadership decided to sustain CM programming as part of routine care
- Some features amended, like amending reinforcers that may be earned
- CM programming sustained for 2+ years post-trial
- Integration of CM library materials into onboarding for new staff
- Similar CM programming enacted at two additional sites during OTP expansion

Sources: Hartzler, 2015; Hartzler et.al, 2016







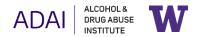
Management Views: Relative Advantage

'My hope was to better engage clients, like 'we know this takes effort for you and we recognize it.' There's definitely therapeutic benefit, that's what I've heard from our staff and the patients.'

'It is an extra component added to an already loaded initial burden that counselors have...but it seems to be worth it to staff, I hear from them about how rapport with new patients is better now.'

'We weren't going to invest in something that didn't give us some return. But [the CM intervention] gives us that return. We're going forward with this, it's in the treatment manual and will continue to be part of the services we provide here.'





Management Views: Compatibility

'The counselors, they see these folks every week anyway, and deliver [the CM intervention] in the context of a session we already pay staff time for. So...there's no added cost there.'

'The timing matches when patients' treatment changes anyway, concluding as counseling frequency goes down and patients are becoming stable. It's well-matched to the layout of our program.'

'We had the right people in place, and this seemed like the right thing to do for our clinic. My anxiety was eliminated, and I had confidence about how it would fit here and go forward.'





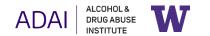
Management Views: Complexity (Simplicity)

'In terms of the logistics, we've come up with solutions for just about everything that's come up. The implementation doesn't need to be all that sophisticated to be done successfully.'

'What made [the CM intervention] manageable was that it was circumscribed in scope, and we had two point-people that all questions could be directed to. That was critical.'

'Many other [CM approaches] would be too complicated to pull off in a consistent way. This was do-able enough that we trained a new staff member who then used [the CM intervention] with her whole caseload.'





Management Views: Trialability

'Most of the counselors are interested in continuing with [the CM intervention]. If people hated it, that would be different. But that's not the case here. Assuming the data show positive effects, we're all inclined to continue with this.'

'[CM procedures] may take away five minutes of a session...but if you have people coming in more regularly you get to focus on things other than noncompliance.'

'We've got an electronic record system where staff can grab patient information quickly, so that made a big difference in terms of accessing what they needed, and for documentation.'





Management Views: Observability

'I was really pleased to see so many of the counselors participate, in the training and then using it with patients. They've done a good job of implementing it and are pretty positive about it.'

'It's one thing to say "the literature suggests this, that, or the other works," and it's another thing altogether for us to now have the experience of having it actually happen.'

'Another thing we got was [patient] feedback to include other incentives, like lock-boxes for take-homes. That was a great suggestion, and we can offer things like that as incentives.'



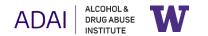


Tips for Customizing your CM programming



Consider your setting's needs and resources





Client eligibility

Tips for implementing CM include choosing clients:

- Who constitute a well-defined population or subgroup
- Among whom you want to increase adherence
- For whom the implementation costs will be affordable







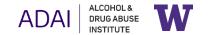
Target Behavior

Tips for implementing CM include targeting a behavior:

- That is observable (not reliant on self-report)
- For which a binary outcome (yes, no) will be clear
- That is clinically meaningful, predictive of success







Tangible Reinforcers

Tips for implementing CM include identifying:

- Goods/services your clients value (ask them)
- A set of reinforcers to enable individual choice
- Bulk purchasing options, storage solutions







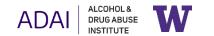
Reinforcement System

Tips for implementing CM include devising a system to:

- Make use of recurrent contacts between staff/clients
- Be compatible with other intersecting clinic operations (i.e., billing/accounting; records/documentation)
- Keep procedures simple for clinical staff (ask them)







Additional considerations

As with implementing any systemic change, consider:

- Eliciting perspectives in initial exploration/planning phases (i.e., managers, staff, clients, community)
- Collecting baseline information about the clinical challenge you seek to address
- Starting small, with expansion after initial success observed during a provisional implementation period
- Utilizing available resources for ongoing reference





Acknowledgements

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- Erinn McGraw, Visual Communications Specialist
- Susan Stoner, Data Operations Specialist





Available Resources



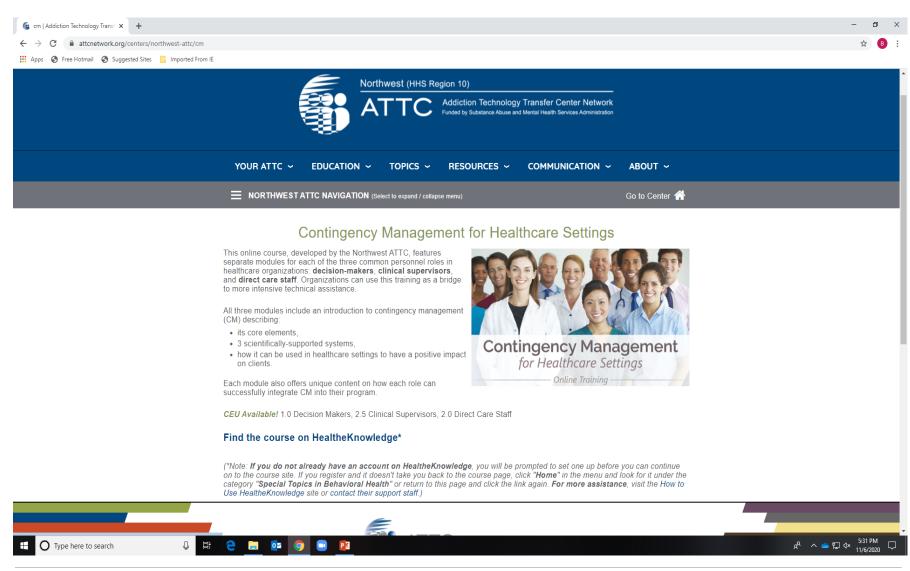


Online training product: Contingency Management for Healthcare Organizations





Available Resources







Online Course







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Every survey we receive helps us improve and continue offering our programs.

https://bit.ly/ImplementingCM_November18



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