Welcome!

We will begin at 1:00 p.m. ET.

Scaling Up Interventions:

From Promising Pilots to Adoption across Sites

August 10, 2023 1:00-2:30pm ET



This webinar was supported by Contract #GS00Q140ADU119 Order #75D30119F05503, funded by the Centers for Disease Control and Prevention.

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Update Your Name

Please update your name to include your jurisdiction/organization. Example: "Emily Kane, ICF"





Housekeeping







Objectives:

- Describe the stages of program implementation, adaptation, and dissemination.
- Examine how and why innovations are accepted and adopted in public health settings by reviewing a Maryland-based drug checking pilot program.
- Identify next steps to leverage implementation science strategies in OD2A programming.



Agenda + Presenters

- Introductions and Housekeeping
- An Implementation Science Framework: Getting To Outcomes (GTO) and Rapid Analysis of Drugs (RAD)
 - Abraham Wandersman, Ph.D., President and CEO of Wandersman Center, Distinguished Professor Emeritus, University of South Carolina in Columbia
 - Maggie Rybak, MPH, Senior Programs Manager, Maryland Department of Health, Center for Harm Reduction Services
- A Dissemination Science Framework: Designing for Diffusion (D4D)
 - Jim Dearing, Ph.D., Brandt Endowed Professor in the Department of Communication at Michigan State University
- Q&A



Chat Prompt

What has been your experience with pilot programs?

For example: helped launch, completed evaluation, replicated



1. A successful pilot \rightarrow Describe it in GTO terms \rightarrow Make it available \rightarrow

Importance of an Implementation Science and Dissemination Perspective

- "In order to implement an intervention with quality, we need to know that it addresses our needs, what it accomplishes, what its key components are and how to put them into practice, and whether it worked for us." U. of Washington
- * Implementation science strategies should help us do this.



















After MacDonald put his plan in place, he monitors to see how his crops are growing.





MacDonald learns from his experiences and thinks of ways to grow his crops even better.



MacDonald plans to have a great harvest every year by planning and implementing with quality!

Chat Prompt

What step in the GTO model do you think could use support/more focus at your jurisdiction?

Which is a particular strength at your jurisdiction?



Applying RAD to GTO

Maggie Rybak, MPH, Senior Program Manager Center for Harm Reduction Services (CHRS)

#1 Are you familiar with drug checking?

Yes No #2 Do your programs/state use any of the following types of drug checking?

Test strips -FTS/ XTS FTIR

Mass Spectrometry (DART MS) Gas or Liquid Chromatography



Introduction to RAD



Background of RAD

- Maryland experienced record breaking number of overdose fatalities in 2020 and 2021
- Maryland Department of Health, Center for Harm Reduction Services sought a way to incorporate drug checking into Maryland's overdose response strategy
- Drug checking programs empower people who use drugs with knowledge about the drug supply and allow them to make informed decisions and employ risk reduction tactics.



Basics of RAD

- CHRS RAD project tests routine paraphernalia from Maryland Syringe Services Program (SSP) participants in partnership with the National Institute of Standards and Technology (NIST) using direct real time mass spectrometry (DART-MS).
- RAD falls under the protections for SSP participants within MD
- When samples are collected, data is submitted to CHRS through a webform



RAD Overview

RAD pilot 8 programs in 8 jurisdictions:

- 5 Local Health Departments •
- 3 Nonprofit organizations •
- 1 nonprofit operating in 2 jurisdictions

At the end of September 2022 we expanded RAD to

samples

- All SSPs interested in the program: 8 additional programs have joined
- Began testing syringes alongside paraphernalia: 20% of samples since than have come from syringes

As of 8/1/23, just under 1,900 samples have been collected.





GTO and RAD



1. Needs and Resources

Maryland public health and public safety partners came together to address the need to fill a gap in overdose prevention data.

- Most overdose data is centered around fatal and non-fatal overdoses
- Drug checking was a way to inform communities and stakeholders about the drug market prior to health outcomes being seen

Resources:

- Building on the existing public health framework of syringe service programs
- Connected with the National Institute of Standards and Technology to have access to additional testing resources and capacity



2. Goals and Objectives

The goals of RAD are to:

- Better understand the drug market landscape in MD
- Empower people who use drugs with knowledge about the drug supply to inform their decisions and reduce risks
- Provide critical information about new and emerging trends in the drug supply
- To inform communities and stakeholders



3. Best Practices

There is a growing body of evidence that drug checking is an effective public health intervention that supports community knowledge and health behavior change

- On-site, rapid drug checking like fentanyl test strips increase knowledge about what is in a drug supply often prior to drug consumption.
- Fourier transform infrared spectroscopy (FTIR) commonly used for on-site drug checking
 - Can lack the sensitivity to capture substances present in low amounts
 - High level of staff capacity and training is needed to implement
- Direct real-time mass spectrometry (DART-MS) not feasible to be onsite throughout the state or mobile, but has a high level of specificity and sensitivity needed to detect the complexities of the drug market.



4. Fit

Our biggest considerations were:

- Low barrier
- Community-based
- Reliable results
- Short Timeline for Implementation



5. Capacity

- SSPs held the correct legal protections and community connections needed to implement this kind of program, but did not have the staff capacity.
- By partnering with NIST to do off site drug checking,
 - SSP's only needed to dedicate a small amount of staff time for drug checking
 - Only a small amount of training was needed for SSP staff
- Choosing NIST as a partner:
 - The capacity to create a standard compound library and make RAD into a federal model.
 - The capacity to perform confirmatory testing
 - Technical knowledge or drug checking and chemical compounds



6. Plan

Planning began in July 2021, with a goal of implementing before the end of the year.

- 10 SSPs were asked in they had interest in participating in the pilot study
- 8 SSPs said yes to the pilot study

Each partner championed a different aspect of planning

- Center for Harm Reduction Services chose sites, built webform and shared databases
- NIST finalized sampling and testing protocol
- Maryland's Opioid Overdose Command Center and OD2A team worked on press release and NIST contract
- Maryland State Police and HIDTA created their own testing protocol with NIST, informed state and local law enforcement of the RAD program protections at SSPs



7. Implementation Time and Process Evaluation

- SSP training held in September 2021 followed by monthly collaborative calls
 - CHRS, NIST, and SSP staff were present at all calls
- The first sample was tested in October 2021
- CHRS partnered with a Johns Hopkins University Research team to complete a process evaluation throughout the pilot



8. Outcome Evaluation

- The pilot ended in September 2022 when RAD became an ongoing resource for Maryland SSPs through CHRS
 - 517 samples were collected across the 8 sites during the pilot
 - Over half samples 52.2% were collected from empty bags/baggies
 - The ability to test syringes was requested by almost all SSPs
 - 95% of samples contained at least one ingredient, with 82% of samples containing 2 or more compounds
 - 72.9% of samples contained fentanyl and related compounds.
 - o 63.4% of samples contained xylazine and related compounds.



8. Outcome Evaluation (Pilot Impact)

- Feasibility of statewide drug checking program
- Better understand the drug supply pervasiveness of xylazine
- Anticipated changes and emerging substances in the drugs supply
- Deepening partnerships with state and local partners
- Increased engagement with SSP participants
- Increased interest in various linkages to care
- Secondary sharing of results by participants to their communities



9. Continued Quality Improvement

- JHU research team distilled themes from all of the collaborative calls
- The CHRS team met with all non-pilot SSPs to talk through barriers to implementation prior to the expansion training call
- JHU research team conducted qualitative interviews with RAD SSP staff and participants

Changes made prior to expansion:

- Syringes are able to be tested
- NIST began pre-labelling sample envelopes
- QI improvements to data collection



10. Sustainability

- Continuing collaborative calls to receive feedback from SSPs
- All SSPs are CHRS grantees and can use grant funding to support RAD services
- NIST is expanding public health and public safety drug checking nationally
 - Completed XTS efficacy study with MD samples
 - Piloting quantitative sampling in MD
- CHRS and the MDH OD2A team continue to support RAD
- Sharing of protocols and results to allow for learning and replication
 - RAD <u>website</u> with <u>1-pager</u>
 - <u>MMWR</u>
 - MDH xylazine workgroup report coming out soon
 - MDH xylazine flyers



Contact RAD

Maggie Rybak <u>Margaret.rybak@maryland.gov</u>



GTO and Accountability

"Accountability is being strategic and resultsoriented with limited time, energy, and money" Wandersman, Alia, Cook, Ramaswamy 2016

GTO Accountability Questions and Supporting Literature Base

Accountability Questions	Relevant Literatures
1. What are the underlying needs and conditions that must be addressed? (NEEDS/RESOURCES)	1. Needs/Resource Assessment
2. What are the goals, target population, and objectives? (i.e., desired outcomes)? (GOALS)	2. Goal Setting
3. What science (evidence) based models and best practice can be used in reaching the goals (BEST PRACTICE)?	3. Consult Literature on Science Based and Best Practice Programs
4. What actions need to be taken so the selected practices "fits" the community context? (FIT)	4. Feedback on Comprehensiveness and Fit of Program
5. What organizational capacities are needed to implement the practices? (CAPACITIES)	5. Assessment of Organizational Capacities
6. What is the plan ? (PLAN)	6. Planning
7. Is the practice being implemented with quality (IMPLEMENTATION/PROCESS) EVALUATION)	7. Process evaluation
8. How well is the practice working? (OUTCOME EVALUATION)	8. Outcome and Impact Evaluation
9. How will continuous quality improvement strategies be included? (CQI)	9. Total Quality Management; Continuous Quality Improvement
10. If the practice is successful, how will it be sustained? (SUSTAIN)	10. Sustainability and Institutionalization

READINESS IS...

Readiness

=

Motivation

Х

Capacity (Innovation-Specific)

Х

Capacity (General)

$R = MC^2$



lccountability Juestion	P1 (LTCA)	P2 (LTCB)	P3 (LTCC)	
Needs/ Resources				
Goals				
Best Practice				
Fit				
Readiness (Motivation X Capacity)				
Plan				
Process				
Outcome Evaluation				
Improvo				

Jim Dearing

Designing for Diffusion



Scaling Up Interventions: From Promising Pilots to Adoption in Multiple Sites OD2A Technical Assistance Center August 10, 2023

This morning

- D4D often means change to an intervention and to the proponent team
 - Diabetes Prevention Program
- 3 factors determine what people adopt
- Partnerships
- Pathways
- Fidelity
- Typical missteps

The typical pattern



D4D often means change to an intervention

- 100 million people in the U.S. 53.6% of the adult population – have diabetes or pre-diabetes.
- The Diabetes Prevention Program (DPP) was a pilot involving 3000 people in 1:1 counseling over a series of meetings. It reduced diabetic incidence by 58%. But it cost \$2700 per participant – one of several complicating deterrents to diffusing the program.
- Yet it did diffuse.
 - How?
- Change to the type of counselor, the modality, with a particular partner through a particular pathway to scale-up

Factor 1: What people think about the intervention

- Design an "innovation profile" that is as positive as possible
 - Cost, compatibility, complexity, effectiveness, trialability, observability
 - What is RAD's innovation profile?

Factor 2: What people think other people think about the intervention



Factor 3: Launch timing and framing of the intervention

- Dissemination is ideally timed to when there is already attention to the problem being addressed
- Framing—the meanings associated with the intervention by potential adopters—should be explored prior to launch so that messages will resonate positively

D4D means partnering



Program designers make a decision about the path they will take



Program Designer 🔮 Efficacy Testing 🏃 Network Organization

Fidelity is often a consideration

- How important will implementation fidelity be?
 - With RAD it sounds important
- Program designers may have already reinvented the intervention
 - What will be their decision about adaptations by implementers?
 - Adaptation happens
 - Guided adaptation

Common mistakes

- Over-reliance on efficacy and effectiveness data
- Rigid requirement of implementation fidelity
- Use of creators as communicators
- Premature introduction
- R&D to marketing expense ratio is reversed
- Lack of clarity regarding demonstrations
- Assumption that status = influence
- Lack of strategic selectivity regarding innovators and early adopters
- Team ambiguity regarding intended adopter need, motivation, and capacity

Chat Prompt

Which of the "common mistakes" ring true in your work?

How have you avoided or remedied common mistakes?

Contact Information

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Questions?

Please enter your questions in the chat or raise your hand.





Tell us what you thought of today's webinar!

Click the link in the chat box.





Thank you!



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