Harm reduction in addiction recovery: Current state and treatment considerations

Matt Boyer, MD and Lauren Scaletta, PsyD

Friday, April 14, 2023

ROGERS Behavioral Health

1

Quick overview of logistics

Our speakers will give a 70- to 75-minute presentation.

Following the presentation, there will be a dedicated time to answer your questions.

- Please use the **Q&A feature**, located in the toolbar at the bottom of your screen, to send your question to the moderator.
- The moderator will review all questions submitted and select the most appropriate ones to ask the presenter.

2

Disclosures

Matt Boyer, MD, and Lauren Scaletta, PsyD, have each declared that they do not, nor does their family have, any financial relationship in any amount occurring in the last 12 months with a commercial interest whose products or services are discussed in the presentation.

The presenters have each declared that they do not have any relevant non-financial relationships. Additionally, all planners involved do not have any financial relationships.

3

Learning objectives

Upon completion of the instructional program, participants should be able to:

1. List three examples of harm reduction used in addiction recovery.
2. Describe at least three benefits of harm reduction for reaching underserved communities.
3. Specify at least three challenges facing the use of harm reduction.

4

What we'll cover in this webinar

Current state

- Barriers to abstinence-only treatment
- Definition of harm reduction and examples harm reduction encompasses
- Overview of the evidence base for harm reduction
- Highlights of current policy changes to support harm reduction
- Issues raised by harm reduction

Case discussions

- Case studies highlighting how harm reduction can be incorporated into treatment

Moderated Q&A

5

Current state

Please use the Q&A feature to send your questions to the moderator.

6

Definition of harm reduction

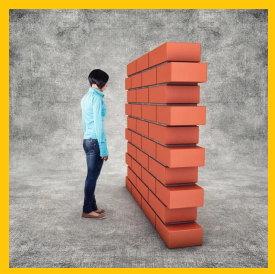
Harm reduction refers to interventions aimed at mitigating risks associated with substance use.

Harm reduction entails discussion of the harms of substance use and strategies to reduce the risks people who use substances face.

(Hawk et al., 2017; Legislative Analysis and Public Policy Association, April 2022)

7

Barriers to abstinence-only treatment



**A non-exhaustive list*

(Rapp et al., 2006)

- Lack of treatment access
- Motivation for change
- Craving management
- Insurance coverage
- Shortage of providers
- Mistrust of providers
- Financial needs
- Employment
- Transportation
- Stigma and shame when relapse occurs
- Mental health diagnoses

8

Why harm reduction?

- Interventions are used to help bring healthcare solutions to marginalized communities who are not supported by traditional systems and are underserved in our society – particularly those who identify as Black, LGBTQ+, women, low-SES.
- More accessible for populations who are stigmatized or do not have access to treatment.
- Can reach populations without judgment if not ready to discontinue use.
- Does not perpetuate risk of criminalization or imprisonment that is more common for diverse populations.
- Historically, there have been disparities between Black-White populations and between Latino-White populations in seeking substance use treatment. Harm reduction hopes to decrease this discrepancy.

(Pinedo, 2019)

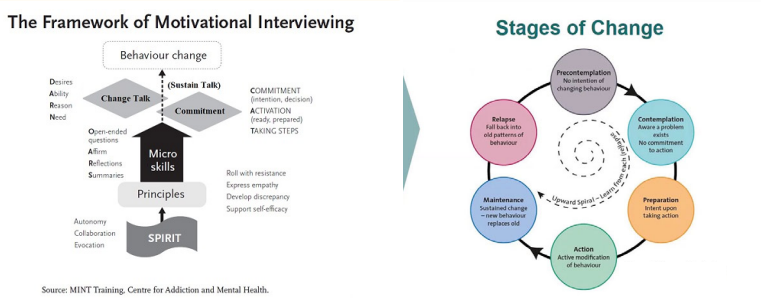
9

Examples of harm reduction

- Naloxone
- Overdose prevention centers
- Syringe service programs
- Overdose prevention education
- Education on safer injection practices
- Medications for opioid use disorder (MOUD)
- Motivational Interviewing

10

Evidence for harm reduction: Motivational Interviewing



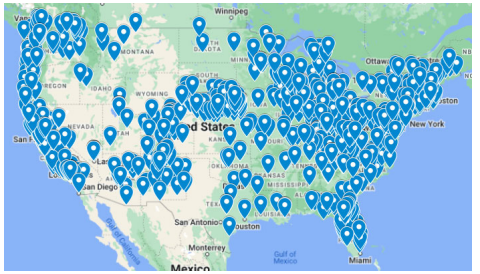
Source: MINT Training, Centre for Addiction and Mental Health.

(Bischof et al., 2021; Prochaska, DiClemente & Norcross, 1993)

11

Evidence for harm reduction: Naloxone

- Naloxone treats opioid overdose
- Standing order
- FDA-approved OTC, nonprescription naloxone



National Harm Reduction Coalition's Naloxone Finder:
https://harmreduction.org/resource-center/harm-reduction-near-you/

12

Evidence for harm reduction: Naloxone

thebmj

Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis

OPEN ACCESS

Alexander Y Walley *assistant professor of medicine, medical director of Massachusetts opioid overdose prevention pilot*[1 3], Ziming Xuan *research assistant professor*[2], H Holly Hackman *epidemiologist*[3], Emily Quinn *statistical manager*[4], Maya Doe-Simkins *public health researcher*[1], Amy Sorensen-Alawad *program manager*[1], Sarah Ruiz *assistant director of planning and development*[3], Al Ozonoff *director, design and analysis core*[5 6]

(Walley et al., 2013)

13

Evidence for harm reduction: Naloxone

- There were 327 rescue attempts using naloxone.
- Most rescue attempts occurred in private settings.
- The rescuer and the person who overdosed were usually friends.
- Naloxone was successful in 98% of the rescue attempts.
- For the 2% of rescue attempts where naloxone was not successful, the people who overdosed received care from the emergency medical system *and survived* (Walley et al., 2013)

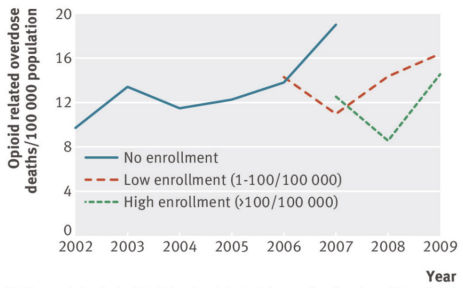


Fig 1 Unadjusted unintentional opioid related overdose death rates in 19 communities with no, low, and high enrollment in overdose education and nasal naloxone distribution program in Massachusetts, 2002-09

14

Evidence for harm reduction: Overdose prevention centers

- Also called supervised injection sites
- Safe places where drug users can inject pre-obtained illicit drugs under the supervision of trained staff
- Access to clean supplies
- Linkage to social services and medical and addiction treatment for those who want it
- There are two in the US, both in New York City
- Efforts in other US cities are underway

15

Evidence for harm reduction: Overdose prevention centers

- Researchers examined overdose mortality rates before and after the opening of an overdose prevention center in Vancouver, BC
- Fatal overdose rate in the area of the overdose prevention center decreased by 35% compared to the rest of the city which decreased by 9.3% (Marshall et al., 2011)


THE LANCET

ARTICLES | VOLUME 377, ISSUE 9775, P1429-1437, APRIL 23, 2011

Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study

Brandon DL Marshall, PhD • M-J Milloy, MSc • Evan Wood, PhD • Prof Julio SG Montaner, MD • Thomas Kerr, PhD

Published: April 18, 2011 • DOI: https://doi.org/10.1016/S0140-6736(10)62353-7

16

Evidence for harm reduction: Overdose prevention centers

- Overdose prevention centers have been operating in Europe, Canada, and Australia since 1986 (Gostin et al., 2019)
- An overdose prevention center in Barcelona was associated with a 50% reduction in overdose mortality (Gostin et al., 2019)
- PWID are less likely to share needles if they regularly use overdose prevention centers (Wood et al., 2006)

17

Evidence for harm reduction: Syringe service programs

- Syringe service programs distribute sterile syringes and drug use supplies and provide education to people who inject drugs
- They also help with safe disposal of sharps and many offer "overdose prevention kits" that include naloxone
- When syringe service programs are combined with MOUD, HCV and HIV transmission is reduced by over two-thirds (Fernandes et al., 2017)

18

Evidence for harm reduction: Syringe service programs

BMC Public Health

RESEARCH ARTICLE Open Access

Effectiveness of needle and syringe Programmes in people who inject drugs – An overview of systematic reviews

Ricardo M Fernandes[1,3], Maria Cary[2], Gonçalo Duarte[1], Gonçalo Jesus[1], Joana Alarcão[1], Carla Torre[2], Suzete Costa[2], João Costa[1,3] and António Vaz Carneiro[1,3*]

(Fernandes et al., 2017)

19

Evidence for harm reduction: Syringe service programs

- Authors concluded that syringe service programs are effective in reducing HIV and HCV (Fernandes et al., 2017)
- New users of SSPs are five times more likely to enter drug treatment and three times more likely to stop using drugs than those who don't use the programs (CDC, 2019)
- Studies in Baltimore (Marx et al., 2000) and New York City (Galea et al., 2001) have also found no difference in crime rates between areas with and areas without SSPs

20

Evidence for harm reduction: Overdose prevention education

- Avoid using substances alone
- Avoid the mixture of substances
- Go slow (sample a small amount first)
- Tolerance can change
- Dispelling the myth that large amounts of drug must be used to cause an overdose
- Use fentanyl test strips

21

Evidence for harm reduction: Overdose prevention education

Research Paper

Fentanyl test strips as an opioid overdose prevention strategy: Findings from a syringe services program in the Southeastern United States

Nicholas C. Peiper[a], Sarah Duhart Clarke[a], Louise B. Vincent[b], Dan Ciccarone[c], Alex H. Kral[a], Jon E. Zibbell[a,*]

[a] Behavioral Health Research Division, RTI International, Research Triangle Park, NC, United States
[b] Urban Survivors Union, Piedmont Chapter, Greensboro, NC, United States
[c] Department of Family and Community Medicine, University of California, San Francisco, CA, United States

(Peiper et al., 2019)

22

Evidence for harm reduction: Overdose prevention education

- PWID with a positive FTS test result had five times the odds of reporting changes in drug use behavior compared to those with a negative result
- Behavior changes included using less substance than usual, administering a tester shot, pushing syringe plunger slower than usual, and snorting instead of injecting (Peiper et al., 2019)

23

Evidence for harm reduction: Safer injection practices education

- Educate patients on safer injection practices
- Safer injection practices include:
  - Rotation of injection sites
  - Cleaning skin prior to injection
  - No reuse of syringes or needles
  - Referral to a syringe service program

24

Evidence for harm reduction: Safer injection practices education

- Safer injection practices are associated with a decreased risk of HIV infection (Aspinall et al., 2014)
- They are not associated with increased drug use (Fisher et al., 1999)

25

Evidence for harm reduction: Safer injection practices education

International Journal of Epidemiology

HIV/AIDS

Are needle and syringe programmes associated with a reduction in HIV transmission among people who inject drugs: a systematic review and meta-analysis

Esther J Aspinall,[1,2]* Dhanya Nambiar,[3] David J Goldberg,[2] Matthew Hickman,[4] Amanda Weir,[1,2] Eva Van Velzen,[2] Norah Palmateer,[2] Joseph S Doyle,[5,6] Margaret E Hellard[5,6] and Sharon J Hutchinson[1,2]

(Aspinall et al., 2014)

26

Evidence for harm reduction: Safer injection practices education

- Randomized trials would be difficult to perform for ethical and practical reasons
- There is evidence to support the effectiveness of NSP in reducing HIV transmission (effect size 0.42 [95% CI 0.22, 0.81] across the six highest quality studies) (Aspinall, et al., 2014)

27

Evidence for harm reduction: Safer injection practices education

- The authors concluded the following:

  "NSP should be scaled up (especially in areas with high rates of HIV transmission among PWID), but should be considered as just one component of a comprehensive programme of interventions to reduce both injecting risk and other types of HIV risk behaviour."

(Aspinall et al., 2014; Fisher et al., 2003)

28

Evidence for harm reduction: Safer injection practices education

JAIDS
JOURNAL OF ACQUIRED IMMUNE DEFICIENCY SYNDROME

Needle Exchange and Injection Drug Use Frequency: A Randomized Clinical Trial

Dennis G. Fisher, Andrea M. Fenaughty, Henry H. Cagle, and Rebecca S. Wells

IVDU Project, Psychology Department, University of Alaska Anchorage, Anchorage, Alaska, U.S.A.

(Fisher et al., 2003)

29

Evidence for harm reduction: Safer injection practices education

- A randomized controlled trial comparing injection drug users (IDUs) randomly assigned to a NEP versus pharmacy sales
- There was no difference in the number of injections over time between the NEP and the pharmacy sales arms of the study
- Also, no difference in the percentage of positive urine test results over time between the NEP and the pharmacy sales arms of the study for morphine or amphetamine (Fisher et al., 2003)

30

Safer injection practices education

- CDC's harm reduction guidance on how to clean syringes
- Not as safe as using sterile syringes and needles

https://www.cdc.gov/hiv/pdf/library/consumer-info-sheets/cdc-hiv-consumer-info-sheet-cleaning-syringes.pdf

31

Safer injection practices education

- HIV testing is indicated when patients report a history of sharing needles
- PrEP is indicated in people who are HIV negative and share needles and/or injection equipment

THE LANCET

Antiretroviral prophylaxis for HIV infection in injecting drug users in Bangkok, Thailand (the Bangkok Tenofovir Study): a randomised, double-blind, placebo-controlled phase 3 trial

Kachit Choopanya, MD • Dr Michael Martin, MD • Pravan Suntharasamai, MD • Udomsak Sangkum, MD • Philip A Mock, MAppStats • Manoj Leethochawalit, MD • et al. Show all authors

Published: June 13, 2013 • DOI: https://doi.org/10.1016/S0140-6736(13)61127-7 • Check for updates

(Choopanya et al., 2013)

32

Evidence for harm reduction: Medications for opioid use disorder (MOUD)

- Buprenorphine, methadone, and long-acting IM naltrexone
- Mechanism of action and protective effect
- Stigma and recovery values influence patients' willingness to accept medications for opioid use disorder

(Brandt et al., 2023)

33

Evidence for harm reduction: Medications for opioid use disorder (MOUD)

Risk of Experiencing an Overdose Event for Patients Undergoing Treatment With Medication for Opioid Use Disorder

Laura Brandt, Ph.D., Mei-Chen Hu, Ph.D., Ying Liu, Ph.D., Felipe Castillo, M.D., Gabriel J. Odom, Ph.D., Raymond R. Balise, Ph.D., Daniel J. Feaster, Ph.D., Edward V. Nunes, M.D., Sean X. Luo, M.D., Ph.D.

Published Online: 9 Mar 2023 | https://doi.org/10.1176/appi.ajp.20220312

(Brandt et al., 2023)

34

Evidence for harm reduction: Medications for opioid use disorder (MOUD)

- Significantly higher probabilities of experiencing an overdose event were observed among those who were never inducted on their assigned study medication (hazard ratio=6.64, 95% CI=2.12, 19.54)
- Also, higher rates among those who were initially inducted however who stopped the MOUD (hazard ratio=4.04, 95% CI=1.54, 10.65) (Brandt et al., 2023)

35

Future directions

Please use the Q&A feature to send your questions to the moderator.

36

Highlights of current policy changes to support harm reduction

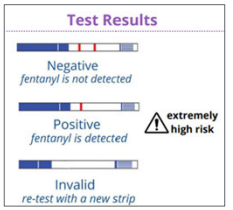
Since 2018, all states in the United States have enacted naloxone access laws permitting dispensing and administering naloxone without a physician's prescription (Smart et al., 2021)

The FDA approved OTC naloxone on 3/29/23
https://www.fda.gov/news-events/press-announcements/fda-approves-first-over-counter-naloxone-nasal-spray#:~:text=Today%2C%20the%20U.S.%20Food%20and,for%20use%20without%20a%20prescription

37

Highlights of current policy changes to support harm reduction

- As of April 2022, 25 states and D.C. allowed for "at least some individuals" to utilize test strips
- In 12 of the states where testing equipment is illegal, the Good Samaritan fatal overdose prevention law may protect someone from criminal penalty

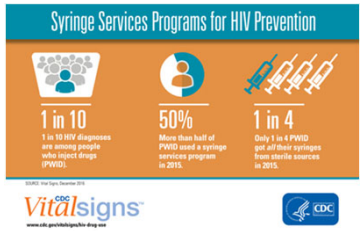


(Legislative Analysis and Public Policy Association, April 2022)

38

Highlights of current policy changes to support harm reduction

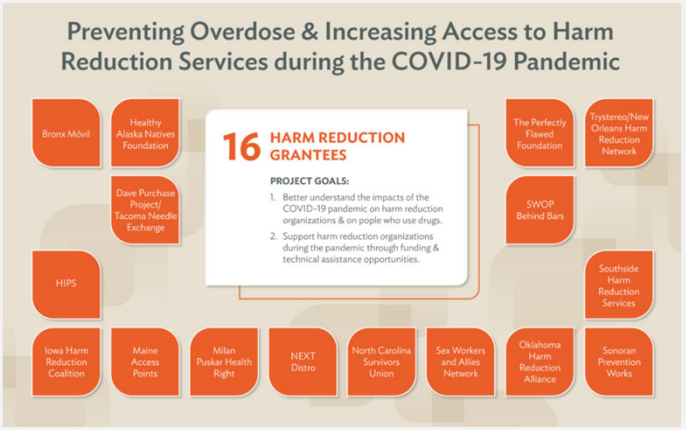
- As of April 2022, 39 states and D.C. allowed for "at least some individuals" to possess/use needles and syringes
- In 11 of the states where needles and syringes are illegal, the Good Samaritan fatal overdose prevention law may protect someone from criminal penalty



(Legislative Analysis and Public Policy Association, April 2022)

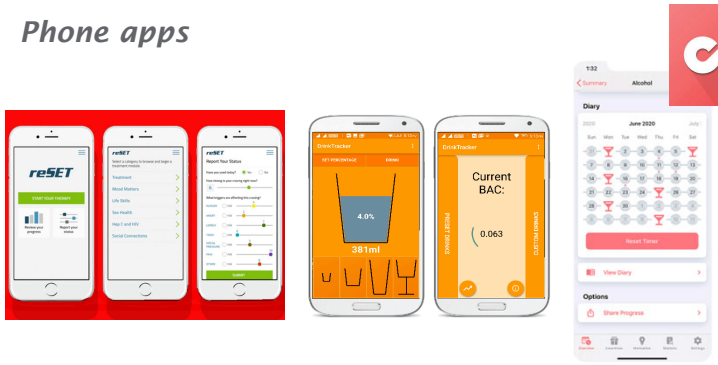
39

National Council for Mental Wellbeing (2023). Harm Reduction. https://www.thenationalcouncil.org/program/harm-reduction/



40

Phone apps



(Tofighi et al., 2019)

41

Issues raised by harm reduction

- Critics argue harm reduction enables drug use
- Medical providers = drug dealers
- As overdose deaths keep rising, pressure to try new strategies mounts

HEALTH

Controversial harm reduction strategies appear to slow drug deaths

September 15, 2022 · 5:08 AM ET
Heard on Morning Edition
By Rachel Martin, Brian Mann

npr

https://www.npr.org/2022/09/15/1123108839/controversial-harm-reduction-strategies-appear-to-slow-drug-deaths

42

Issues raised by harm reduction

- Concerns about overdose prevention centers leading to increased criminal activity or drug use are not supported by the evidence (Levengood et al., 2021)
- 90% of people using an overdose prevention center reported they would otherwise be injecting in a public restroom, street, park, or parking lot (Kral et al., 2017)

AJPM American Journal of Preventive Medicine

Supervised Injection Facilities as Harm Reduction: A Systematic Review

Timothy W. Levengood, MPH • Grace H. Yoon, MS • Melissa J. Davoust, MSc • ...
Brandon D.L. Marshall, PhD • Sean R. Cahill, PhD • Angela R. Bazzi, PhD • Show all authors

Published: July 01, 2021 • DOI: https://doi.org/10.1016/j.amepre.2021.04.017 • Check for updates

43

Issues raised by harm reduction

- A cost-benefit analysis of a hypothetical site in Baltimore, MD., predicted that it would generate $7.8 million in savings at an annual cost of $1.8 million (Irwin et al., 2017)
- Another estimate in New York City predicted that one supervised injection site could save $800,000 to $1.6 million in annual health care costs from opioid overdoses (Behrends et al., 2019)

BMC Part of Springer Nature

Research | Open Access | Published: 12 May 2017

Mitigating the heroin crisis in Baltimore, MD, USA: a cost-benefit analysis of a hypothetical supervised injection facility

44

Case discussions

Q&A

Please use the Q&A feature to send your questions to the moderator.

45

Case example: Martin

A: 20, Gen Z

D: OUD, CUD, MDD, GAD, PTSD, ADHD

D: No physical disability or health issues

R: History of spirituality, no current religion followed

E: White, non-Hispanic

S: Bisexual

S: Low SES, high school education, attending treatment on a grant, no current employment

I: No indigenous history

N: U.S. Born

G: Male, he/him/his pronouns

Martin is a 20-year-old diagnosed with opioid use disorder and cannabis use disorder. In addition, he struggles with depression, ADHD, and anxiety.

Martin grew up in a large city and had significant exposure to community violence and trauma throughout his life. He struggles with coping strategies and social skills, in addition to his recent battle with opioid use. He is using fentanyl and has a history of two overdoses prior to treatment.

Martin is entering residential treatment to address opioid use and is currently in the Contemplative stage of change about lifelong abstinence. He is not currently receptive to discontinuation of cannabis use as he feels it is more of a coping skill rather than a "drug."

What are harm reduction interventions we can use for Martin?

46

Case example: Ana

A: 30, Millennial

D: OUD, SUD, GAD

D: Malnourished, amenorrhea

R: Not spiritual or religious

E: Hispanic, white

S: Bisexual

S: Undomiciled, employed in sex work, public insurance, completed high school, some college

I: No indigenous history

N: Born in the U.S.

G: Female, she/her pronouns

Ana is a 30-year-old Hispanic white woman with opioid and stimulant use disorders and a long history of anxiety.

Ana is a sex worker and is undomiciled. She injects drugs and sometimes shares injection equipment with her clients. She reports she lost access to PrEP two months ago when she was evicted from the motel where she had been living.

Ana presents to the outpatient clinic reporting some interest in cutting back on her use of illicit substances. She asks, "Is there someone I can see about getting a bup script?"

What are some appropriate harm reduction strategies for Ana?

47

Time for questions and answers…

- Please use the Q&A button – not the chat – to submit your question
- If we don't get to your question, please feel free to send an email to **webinars@rogersbh.org** and we will follow-up with you

48

Where to get additional information…

NATIONAL HARM REDUCTION COALITION

harmreduction.org

NATIONAL COUNCIL for Mental Wellbeing®

HEALTHY MINDS • STRONG COMMUNITIES

thenationalcouncil.org

NIH National Institute on Drug Abuse
Advancing Addiction Science

nida.nih.gov

49

Thank you…

A continuing education certificate for this program will be obtained using the website **CE-Go.com**.

You will receive an email with a link to your personal dashboard – this will be emailed to the account you used to register for this event.

Upon accessing the CE-Go website, you will be able to:

- Complete the mandatory evaluation form
- Download your CE Certificate in PDF form

Call or visit:
800-767-4411 | rogersbh.org

ROGERS Behavioral Health

50

About the presenters….

Matt Boyer, MD

Dr. Boyer is a board-certified adult psychiatrist and an addiction psychiatrist at Rogers Behavioral Health's Philadelphia location.

Lauren Scaletta, PsyD

Dr. Scaletta is a clinical supervisor of the Herrington Center for Mental Health and Addiction Recovery Adult Residential Care at Rogers' Oconomowoc and West Allis campuses.

Call or visit:
800-767-4411 | rogersbh.org

ROGERS Behavioral Health

51