

EMS Focus

A Collaborative Federal Webinar Series

NHTSA's Office of EMS

Friday, March 22, 2024 at 2pm ET

EMS Harm Reduction and SUD Treatment



EMS FOCUS WEBINAR



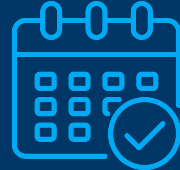
VARIETY OF TOPICS

Provides the EMS community with a unique opportunity to learn more about Federal EMS efforts and programs.



EXPERIENCE

Brings Federal, State and local leaders to you!



REGISTER

With opportunity for Q&A. Closed captioning is available.



FEEDBACK & QUESTIONS

nhtsa.ems@dot.gov

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April 2024



June 2024



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Featured Resources

Use these links to find the most popular resources on EMS.gov:

- "Star of Life" Brochure
- Education Standards
- EMS Agenda 2050
- Evidence-Based Guidelines
- Innovation Opportunities for Emergency Medical Services: A Draft White Paper
- Managing Emerging Diseases
- NEMSIS
- Scope of Practice Model
- State Assessments

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Resources

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BROWSE BY CATEGORY

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- National EMS Instructional Guidelines



NHTSA Office of EMS

Mission



Reduce death & disability



Provide leadership & coordination to the EMS community



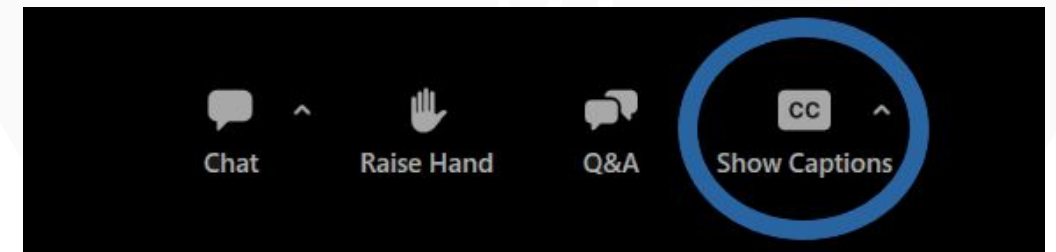
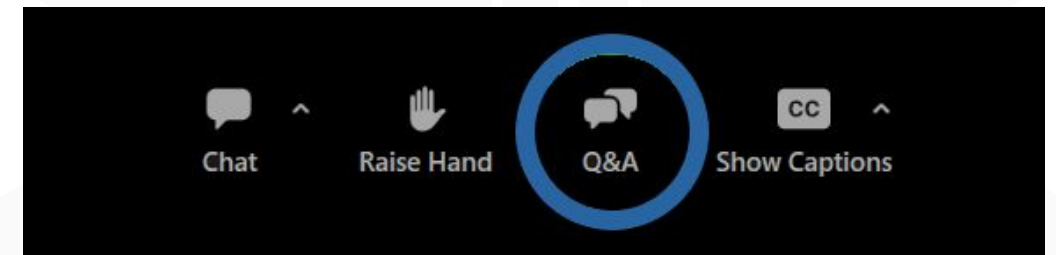
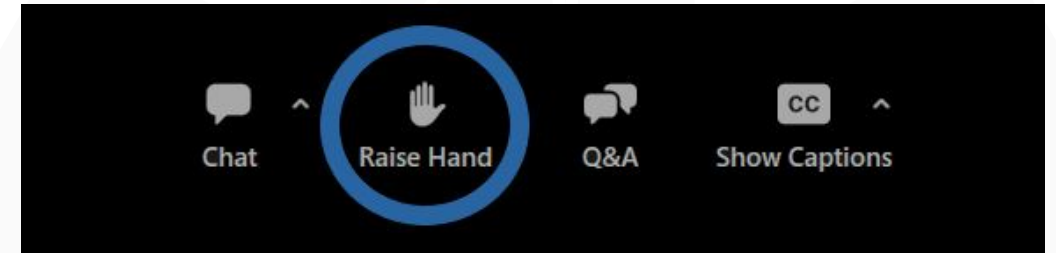
Assess, plan, develop, & promote comprehensive, evidence-based emergency medical services & 911 systems



ZOOM FUNCTIONS

This webinar will utilize three features in the Zoom Meeting controls.

- “Raise Hand” - Use this feature to ask your question live. You will be called upon and unmuted
- “Q&A” - Use this feature to submit your question virtually in a pop-up window/chat box
- “Show Captions” - Use this feature to turn on closed captions at any point during the webinar



Today's Topic: EMS Harm Reduction & SUD Treatment

Gerard Carroll, MD, FAAEM, FAEMS, FASAM, EMT-P.

EMS Medical Director, Cooper University Health Care; Division Head of EMS/Disaster Medicine; and Program Director, EMS Fellowship Program

John Ehrhart

Paramedic; EMS Manager, San Diego Health Connect; Co-Founder, California Paramedic Foundation; and Founder, Mission Critical Protocols

Simon Taxel

Paramedic Crew Chief and Public Safety Diver, Pittsburgh Bureau of EMS; Bloomberg Fellow, Johns Hopkins Bloomberg School of Public Health

Spectrum of the EMS Response to OUD

Gerard Carroll, MD, FAAEM, FAEMS, FASAM, EMT-P.
Associate Professor of Emergency Medicine
EMS Fellowship Director
Cooper Medical School of Rowan University
Division Head, EMS and Disaster Medicine
Department of Emergency Medicine
Cooper University Healthcare



Spectrum of EMS Responses to OUD

BEFORE

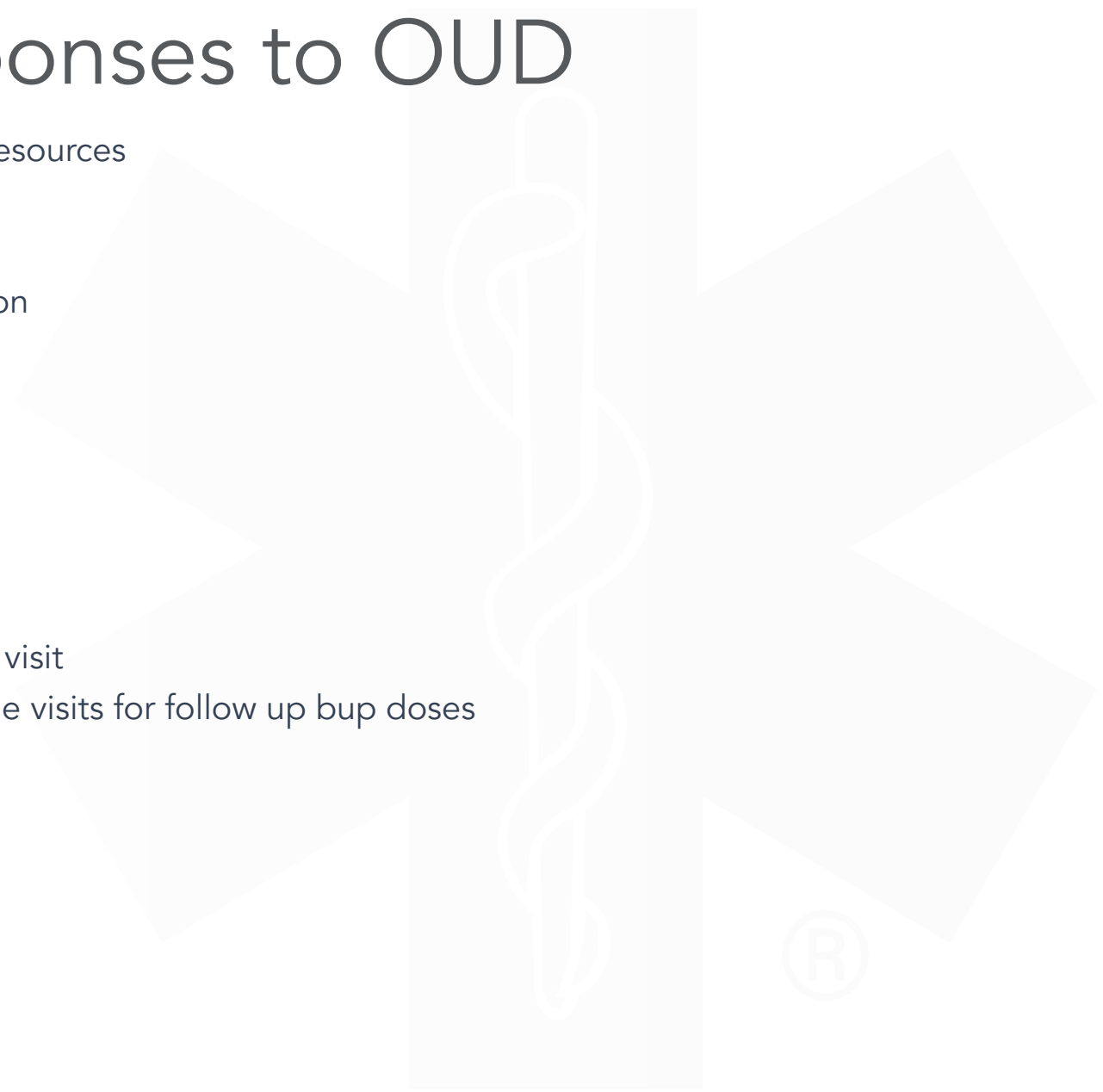


- Screening of Patients. Distributing Resources
- Safe Drug Drop
- Education & Referral
- First Responder Narcan kit distribution
- Drug checking

AFTER






- OVERDOSE OCCURRENCE
- Opioid Overdose Receiving center
- Handoff to Public Health after 911
- Mobile Integrated Teams with home visit
- Mobile Team give after ED BUP home visits for follow up bup doses
- Paramedic initiated Buprenorphine



EMS Buprenorphine Literature

Annals of Emergency Medicine Impact of Administering Buprenorphine to Overdose Survivors Using Emergency Medical Services

Gerard Carroll, MD   • Keisha T. Solomon, PhD • Jessica Heil, MS • ... Emily Murphy, MD •
Kaitlan Baston, MD • Rachel Haroz, MD • [Show all authors](#)



Prehospital Emergency Care

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/ipec20>

Prehospital Initiation of Buprenorphine Treatment for Opioid Use Disorder by Paramedics

H. Gene Hern, David Goldstein, M Kalmin, S Kidane, S Shoptaw, Ori Tzvieli & Andrew A Herring

Taylor & Francis
Taylor & Francis Group



Prehospital Emergency Care

ISSN: 1090-3127 (Print) 1545-0066 (Online) Journal homepage: <https://www.tandfonline.com/loi/ipec20>

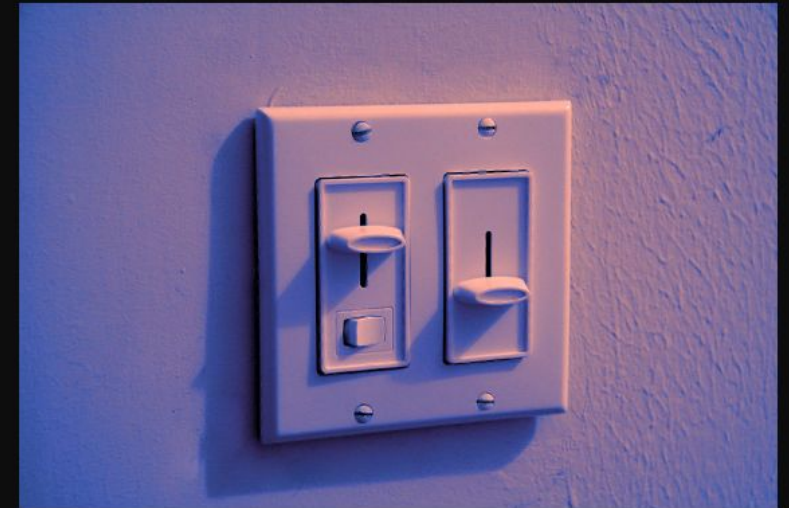
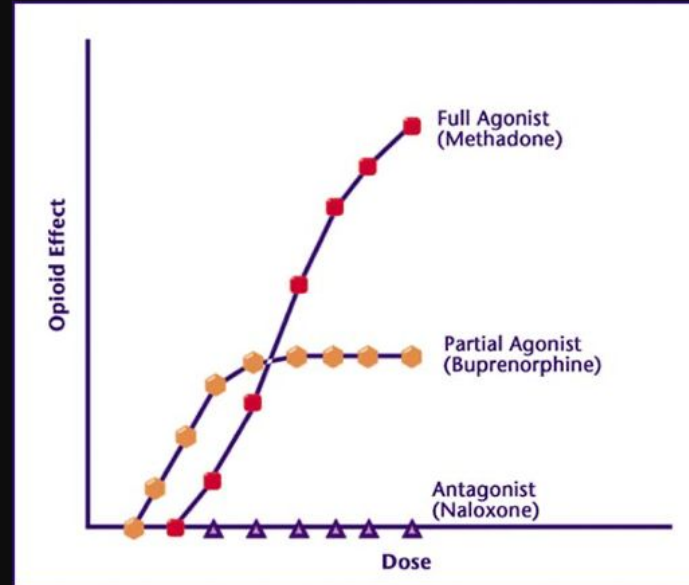
Buprenorphine Field Initiation of ReScue Treatment by Emergency Medical Services (Bupe FIRST EMS): A Case Series

Gerard G. Carroll, Deena D. Wasserman, Aman A. Shah, Matthew S. Salzman, Kaitlan E. Baston, Rick A. Rohrbach, Iris L. Jones & Rachel Haroz

Taylor & Francis
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Buprenorphine

- μ -opioid receptor partial agonist
 - High affinity \rightarrow displaces other opioids
 - Partial agonism \rightarrow ceiling effect on respiratory & CNS depression
- κ -opioid receptor antagonist



Erstad BL, Glenn MJ. Management of Critically Ill Patients Receiving Medications for Opioid Use Disorder. Chest. 2023 Oct 28:S0012-3692(23)05669-6. doi: 10.1016/j.chest.2023.10.024. Epub ahead of print. PMID: 37898187.

Erstad BL, Glenn MJ. Considerations and limitations of buprenorphine prescribing for opioid use disorder in the intensive care unit setting: A narrative review. Am J Health-Syst Pharm 2023.

Key Protocol Components

- Recognize developing Withdrawal
- Engage with the patient/ restore dignity
- Aggressive Induction 16 - 24 mg
- Low Barrier Follow up (for patients and medics)

Protocol Comparison - Inclusion/Exclusion

CAMDEN, NJ

- Naloxone opiate withdrawal
- No Methadone - last 48 hours
- Regain Capacity
- Pregnancy exclusion removed
- Age > 18 just lowered to 16
- COWs > 7 just lowered to 5

CONTRA COSTA, CA

- Camden +
- No Methadone last 10 days
- No benzos/ ETOH
- Not Pregnant (soon to change)
- Age > 18 (soon to change)
- COWs > 7

Protocol Comparison - Intervention

911 Encounter:

- **16 mg buprenorphine/naloxone - (2 films) + 4 mg ondansetron**
- **Additional 8 mg buprenorphine/ naloxone - (1 film)**
- **Monday - Friday - Addiction Walk-In Clinic - Camden**
- **Substance Use Navigator - Follow up - Contra Costa**

OUTCOMES

Camden

CA

7 Days In Treatment

30%

29%

30 Days In Treatment

22%

26%

Avg. COWS Reduction

7.1

6.9

Operations/Safety

Camden, NJ

Contra Costa CA

Scene Time Bupe vs None

7 minutes

NA

Precipitated Withdrawal

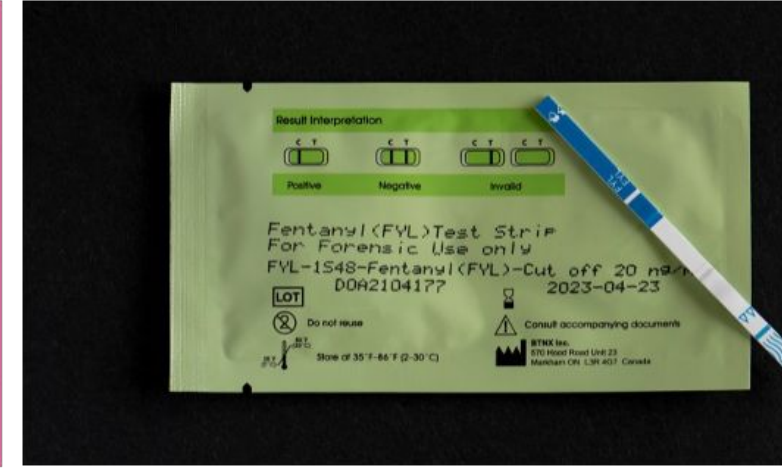
~1 %

~1%

Refusal Rate post Bup

48%

1%

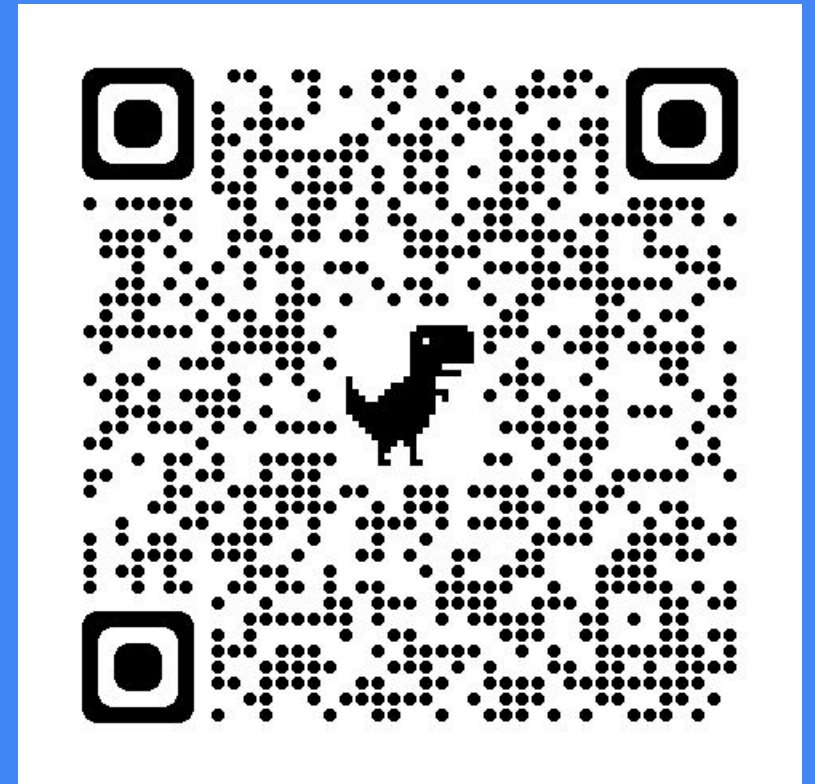


Lots of Options!

EMS Bup Resources



Cooper EMS MOUD - Google Folder



Contra Costa
www.emsbridge.org

John Ehrhart

Paramedic; EMS Manager, San Diego Health Connect;
Co-Founder, California Paramedic Foundation; and
Founder, Mission Critical Protocols



**John Ehrhart, Paramedic,
EMS Manager**

jehrhart@sdhealthconnect.org



**CALIFORNIA
PARAMEDIC FOUNDATION**



- **Vision of the future EMS.**
- **Integrating programs into existing EMS operations.**
- **Building multiple programs into dynamic programming portfolios.**
- **Partnering with technology vendors to position ourselves for success.**

IN 2050, EMS SYSTEMS ARE PEOPLE-CENTERED.



The Values That Led Us Here

- Avoid wallowing in the problems of today
- Focus on bold, ambitious ideas
- Commit to open and inclusive input
- Listen to opinions, criticism, and critique

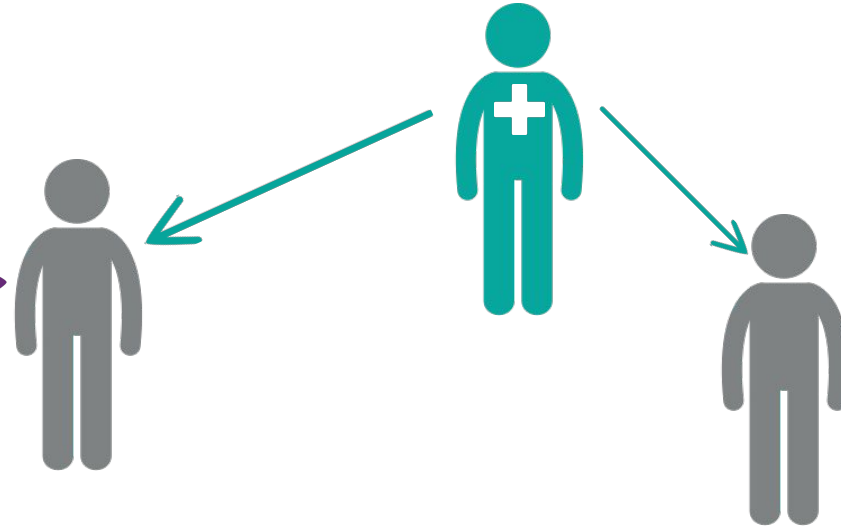
9-1-1 vs Non-9-1-1 Systems

● 9-1-1 System



Responsive system
reimbursed through
transport fees or funded
by government.

● MIH/CP



Alternative model working
outside of 9-1-1 response,
funded through governments,
grants,?

9-1-1...

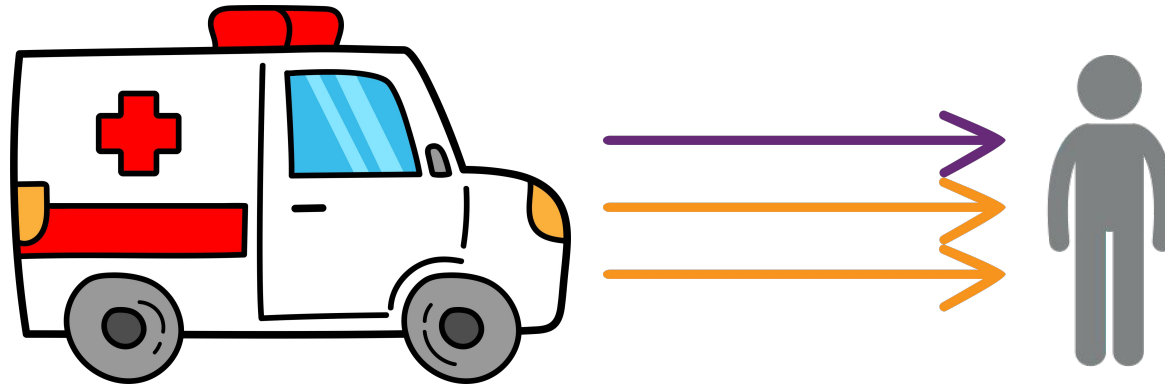
- Data Sharing
- Naloxone
Distribution
- Buprenorphine
- Electronic Referral

...and Beyond

- MIH/CP
- Task Forces
- Community
Outreach

Value Add of 9-1-1 Prevention Programs

- 9-1-1 System
- Program 1
- Program 2



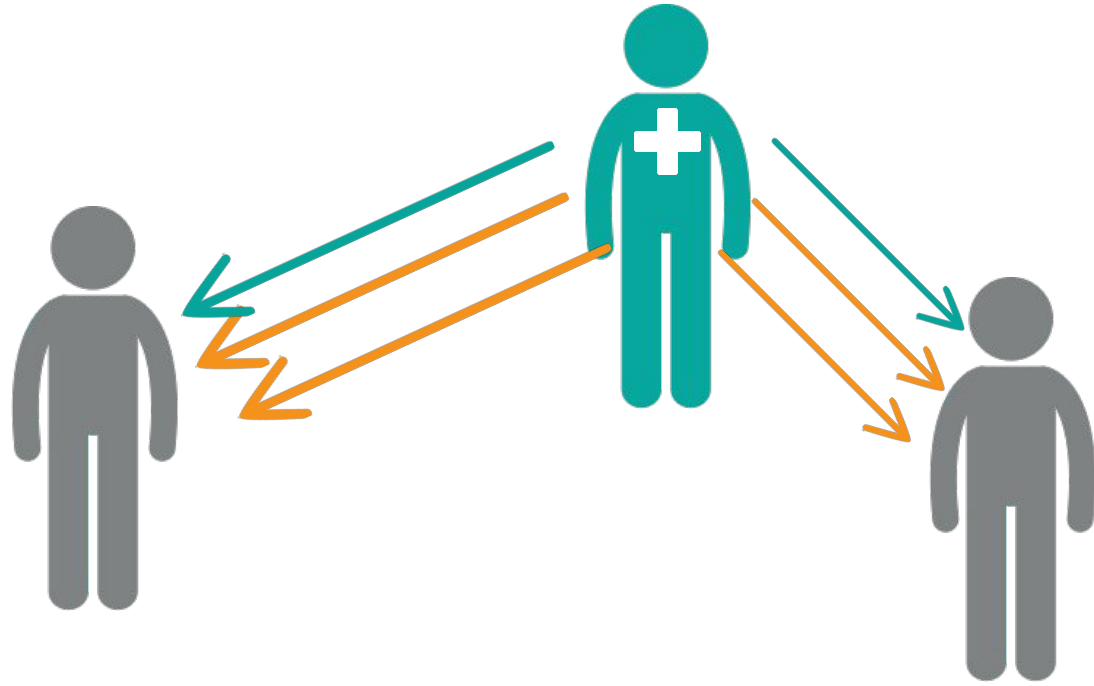
Why it matters: Existing EMS infrastructure can bring additional resources to their patients and be utilized in a non-disruptive way to support other stakeholders missions (e.g. public health).

Value Add of Non-9-1-1 Prevention Programs

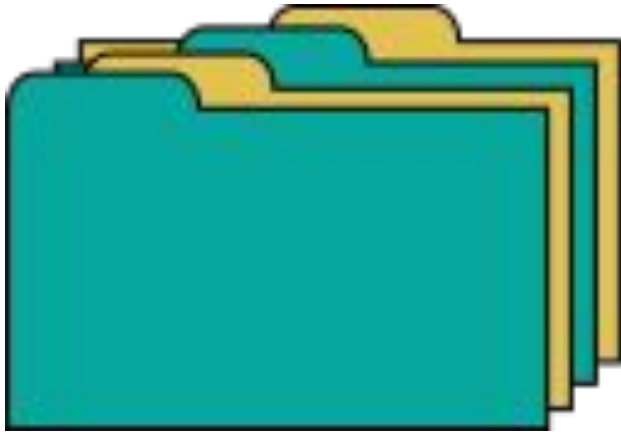
● MIH/CP

● Program 1

● Program 2



Why it matters: Increases the partnership, relevancy, viability and funding of existing or potential MIH/CP programs.



Prevention Portfolios:

- Based on EMS data demonstrating interface with EMS and potential program partnership.
- Augmented to EMS operations in non-disruptive, value adding ways.

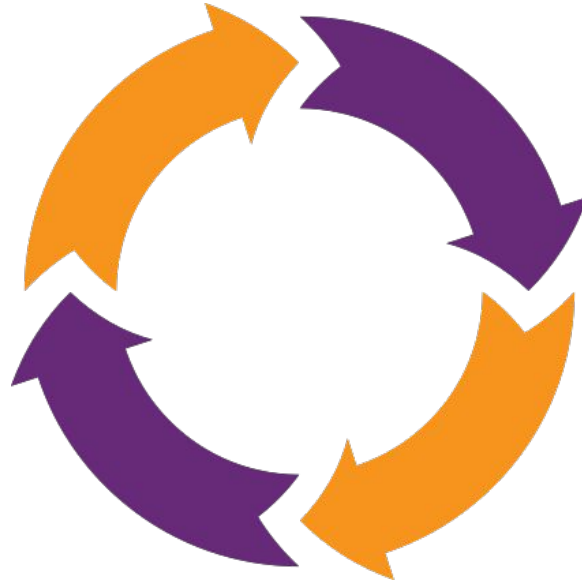
Prevention Portfolios



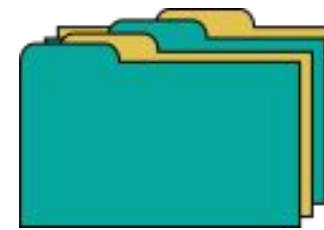
Evaluate EMS Data and Partnership Opportunities for viable programs.



Monitor Portfolio

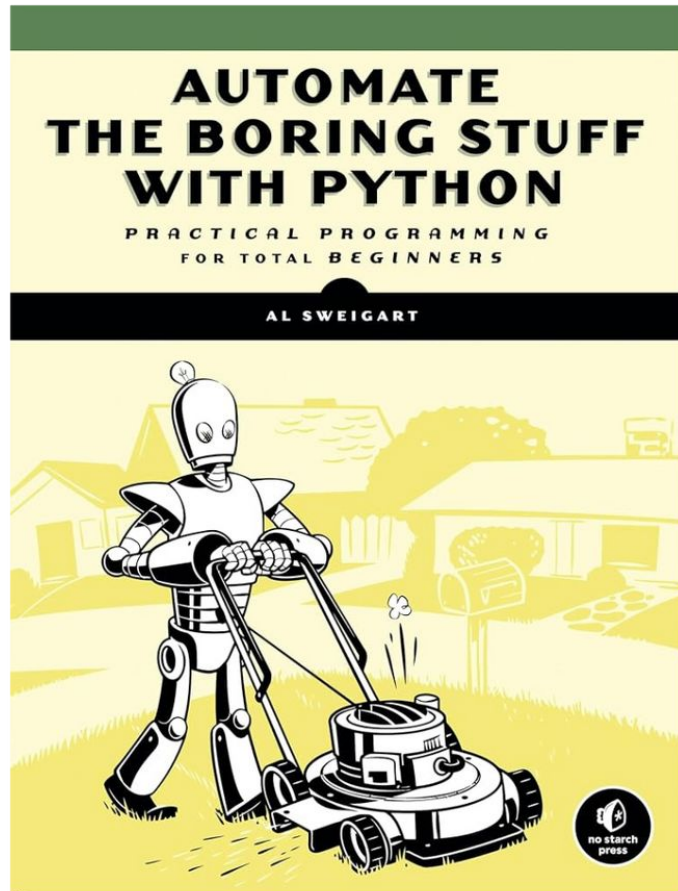


Design Programs to integrate with operations.



Operating programs become portfolio.

Opportunities with Technology



- Require technology vendors to build solutions that support the vision of EMS organizations.
- Automate the evaluation of EMS data for potential programs and partnership..
- Use new tools, like AI, to more easily and effectively build dynamic programs and portfolios.

Simon Taxel

Paramedic Crew Chief and Public Safety Diver,
Pittsburgh Bureau of EMS
Bloomberg Fellow, Johns Hopkins Bloomberg School of
Public Health



Pittsburgh EMS Harm Reduction Resources



- Optimized strategy for overdose management
- Utilization of prehospital buprenorphine
- Supply naloxone and fentanyl test strips
- Distribution of recovery service information

Pittsburgh EMS Harm Reduction Resources



- Warm hand off to UPMC addiction medicine outpatient treatment
- Implementation of SBIRT for patients with non-urgent medical needs
- Co-response with social work/ peer support team
- Pilot project for HEP A vaccination

Q&A

Use Q&A function for Live Responses.



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Feedback & Questions

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THANK YOU!