

Designing for Dissemination and Sustainability: Stakeholder Engagement to Develop Community Pharmacy Educational Materials

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Presentation to: 22nd International Social Pharmacy
Workshop (ISPW) July 8 – 11, 2024, Banff Alberta, Canada



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Funding

- This project was supported by the UW-Madison Clinical and Translational Science Award (CTSA) program, through the NIH National Center for Advancing Translational Sciences (NCATS), grant UL1TR002373
- This work was also supported by the Wisconsin Department of Health Services Grant Numbers 435200-G19-23236646-980 and 435200-G20-23236646-80

Conflicts of Interest

The author has no conflicts of interest.

D4DS Organizing Schema

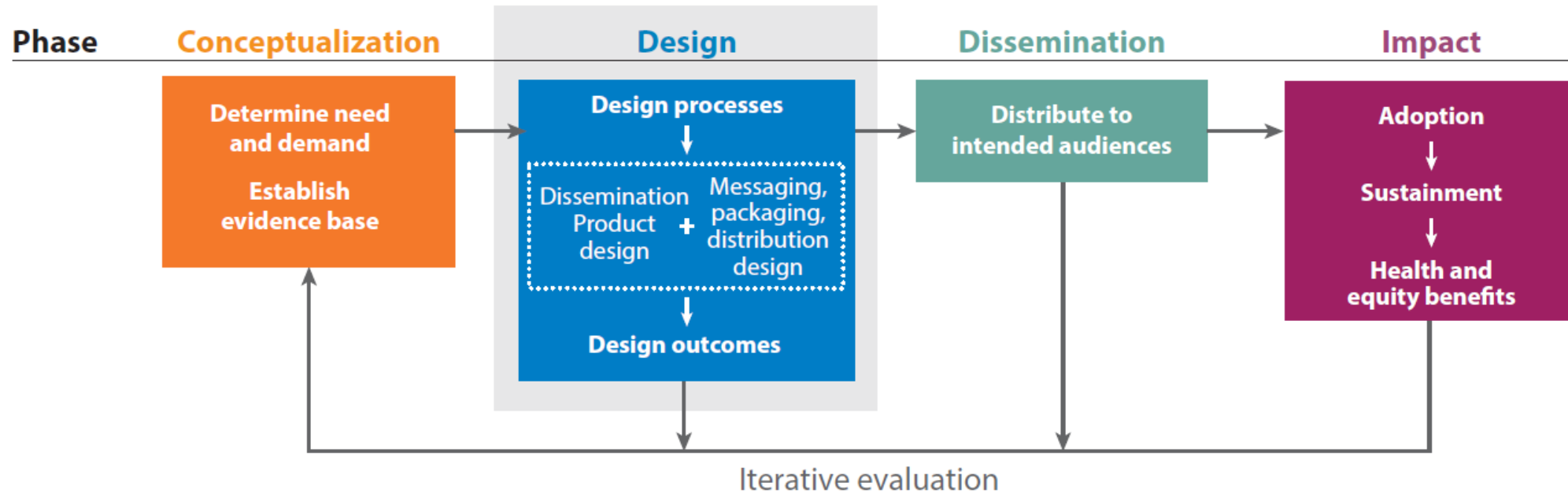


Figure 1

Designing for dissemination and sustainability (D4DS) organizing schema and logic. A logic model for D4DS includes conceptualization, design, dissemination, and impact phases. Results of a narrative literature review of D4DS are organized with an emphasis on the design phase and corresponding design processes, products, and outcomes.

Background: Opioid Epidemic

- The ongoing opioid epidemic, compounded by the COVID-19 pandemic, resulted in greater healthcare utilization¹⁻⁴ and a 40% increase in overdose deaths.^{5,6}
- Access to medications for opioid use disorders (MOUD) is a crucial public health strategy in confronting the opioid epidemic.⁹⁻¹²
- Injectable naltrexone (IN), prescribed by a licensed provider without a controlled substances registration, reduces healthcare utilization (e.g., ED visits)^{3,8} and relapse,^{15,16} and improves medication adherence,^{8,17} treatment continuation,¹⁸ and employment.⁷
- Despite evidence of effectiveness which should make IN more accessible than other MOUD,^{13,14} access is limited in part because prescribers/referral sources lack awareness.
- Naloxone is widely available and educational brochures have been developed. However, brochure content varies, and development may not support a patient perspective.

Background: Why Community Pharmacists

Community pharmacists in Wisconsin are well-positioned to support the opioid epidemic due to:

- 1) Legal authority to administer injectable naltrexone since 2016,¹⁹
- 2) Greater patient accessibility than other practitioners increasing access to MOUD,
- 3) Training to provide patient education about what to expect pharmacologically with MOUD including naloxone or naltrexone,
- 4) Availability for patient follow-up once injectable naltrexone is administered.²⁰⁻²³
- 5) Acceptability as care providers to makes them a viable resource provide education about naloxone and injectable naltrexone²⁴
- 6) Passage of [Wisconsin Act 98](#) gives the pharmacist “provider status,” allowing pharmacists to bill under Medicaid for services such as administering injections or providing alcohol and/or other drug abuse services such as screening or a brief intervention.

Naloxone Educational Brochures

Conceptualization: Naloxone Educational Brochures

Identified existing naloxone educational brochures (n=12)

- Examples obtained from County Health Dept, Pharmacy chains, federal government, etc.
- Mix of words and images to convey messaging

Evidence base of effective strategies to address the health problem.

Examined each brochure to

- Identify brochure sections (n=26)
- Aggregate brochure content
- Summarize brochure content to create new categories (n=13)

Focus on innovation attributes when thinking about its application in a particular setting (community pharmacies)

Convened an expert panel to:

- Rank order sections in order of importance
- Assessed target audience (family, individual)
- Assigned content as educational or crisis

Summary of Naloxone Brochure Categories

Items in **RED**
mentioned in
 ≤ 3 brochures

Items in **GREEN**
mentioned in
 > 9 brochures

Items in **BLUE**
mentioned in 3-8
brochures

Sharing
information with
family

Quick facts
about naloxone.

What does an
overdose look
like?

What is an
opioid?

Reducing Harm

Naloxone
storage

Steps to
Respond in case
of an overdose

Keeping yourself
safe

"I don't have
naloxone", now
what

What should I
expect after
giving naloxone?

When to get a
refill

How will I know
someone needs
Naloxone.

Risk Factors for
an overdose

Participatory Design: Developing Naloxone Brochures

- Community Advisors on Research Design and Strategies (CARDs) which included a group of 12 individuals with lived experience related to opioids
- Utilized a structure meeting agenda over a series of meetings to seek input on the different sections of the naloxone brochure.
- Met with UW Legal to ensure not violating laws regarding the provision of health advice.

Structure of Participatory Design Meetings

Meeting 1

- Identified best visual options for naloxone administration for all four medications on the market in 2021
- Reviewed emergency/crisis content (headers and section text)

Meeting 2

- Reviewed mock-up of brochure sections from meeting 1.
- Discussed education materials (what are opioids, naloxone quick facts, trouble giving naloxone, opioid emergency risk factors, keeping safe)

Meeting 3

- Reviewed and provided feedback on the final design and content of the five panels of the naloxone brochure.
- Provided final thoughts and comments.

WHAT TO DO IN AN OPIOID EMERGENCY

How Do You Know That a Person Needs Naloxone?

It is important to recognize any or all of the following signs and act fast

Signs of a Possible Opioid Emergency:

- Overly sleepy/drowsy & difficult to wake up
- Does not respond to touch or voice
- Body is limp
- Breathing is very slow or irregular
- Makes gurgling, gasping, or choking sounds

Signs of an Immediate Opioid Emergency:

- Blue, pale, or gray lips or fingernails
- Skin turns blue, pale, or cold
- Breathing has stopped



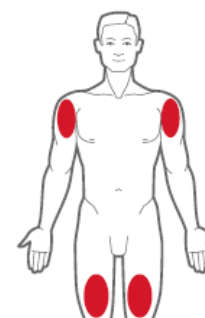
If you notice any signs of a **Possible Opioid Emergency**, quickly try to wake the person up by doing the 3 S's:

- ➔ **SHOUT** the person's name
- ➔ **SHAKE** the person's shoulders forcefully
- ➔ **STERNAL RUB** Make a fist with your hand and strongly rub the center of the person's chest/breastbone with your knuckles - it should cause pain

If the person does not wake up after performing the 3 S's, immediately administer Naloxone and then call 911.

Administer Intramuscular Naloxone

Multi-step Intramuscular Naloxone

- 1 Remove caps from naloxone vial and needle. 
- 2 Insert needle through rubber plug with vial upside down; pull back on plunger, take up entire contents. 
- 3 Inject whole vial into upper arm or thigh muscle. 
- 4 If no response in **two** minutes, give second dose.

 **Call 911**

Naloxone usually **takes up to 1 to 5 minutes to work** before a person begins breathing & starts to wake up

- ➔ Tell dispatcher, "I think it is an overdose. I have given a dose of Naloxone"
- ➔ Follow instructions provided by the dispatcher

This brochure is meant for informational purposes only and is not intended to be used as the only source of information about Naloxone. Talk to your health care provider or pharmacist—and read the package insert included with your prescription—to learn more about Naloxone. This brochure is created as part of the outreach mission of UW-Madison-School of Pharmacy and does not represent an endorsement of any specific commercial product and should not be read to imply a relationship with any manufacturer

Administration image was changed for each specific medication

EDUCATING YOURSELF ABOUT NALOXONE

Naloxone Quick Facts

- Narcan® is a brand name of Naloxone
- Naloxone is a safe, life-saving FDA-approved medication used to treat an **opioid emergency***
- Naloxone works by quickly stopping the effects of opioids and can restore normal breathing
- Naloxone should always be near you, even when traveling
- Naloxone should be stored at room temperature and away from direct light

***Taking opioids can cause a person's breathing to slow or even stop.**

This is called an **opioid emergency**

Keeping Yourself Safe

Involve your family and friends:

- Always tell your family and friends where your Naloxone is stored
- Create an action plan so your family and friends are prepared to respond and give Naloxone in an **opioid emergency**

Get a Naloxone refill when:

- One or more doses are used
- It is lost, damaged, or expired

If Naloxone is used:

- Tell your doctor
- Tell the pharmacist

EDUCATING YOURSELF ABOUT OPIOIDS

What are Opioids?

Opioids are a class of drugs usually prescribed by a doctor to manage pain.

Examples of prescribed opioids include:

Actiq®	Hydromorphone	Oxycontin®
Buprenorphine	Methadone	Oxymorphone
Codeine	Meperidine	Percocet®
Demerol®	Methadose®	Suboxone®
Dilaudid®	Morphine	Tylenol #3®
Duragesic®	MS Contin®	Vicodin®
Fentanyl	Opana®	
Hydrocodone	Oxycodone	

Heroin is an illegal opioid that is not prescribed by doctors.

FACTORS THAT INCREASE YOUR RISK OF AN OPIOID EMERGENCY

Being 65 years or older (but an **opioid emergency** can occur at any age)

Having the following medical conditions such as:

- sleep apnea
- kidney or liver problems
- a history of substance use or mental health disorders

Taking a prescription opioid in ways that differ from the doctor's instructions, such as skipping doses or taking extra doses

Taking an opioid that is prescribed for someone else

Using street drugs like heroin or non-prescription fentanyl

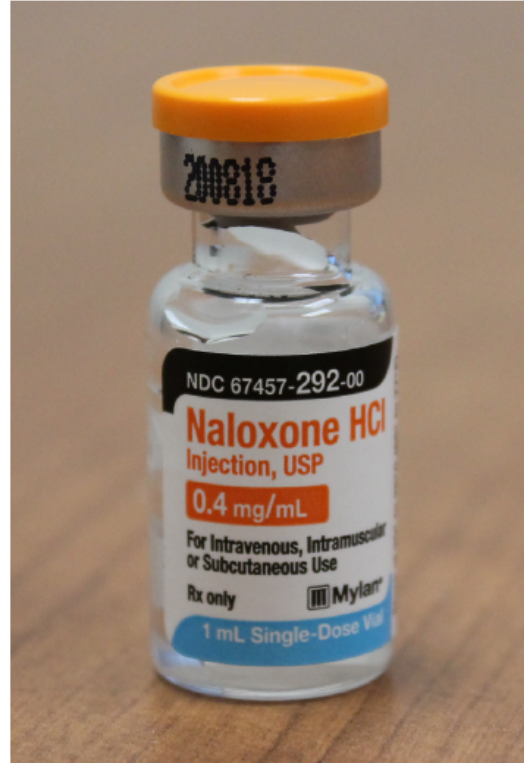
Using opioids again after taking a break (e.g., due to detox, abstinence-based treatment, or time between opioid treatments)

Mixing opioids with alcohol, other medications, or street drugs

Having recent emergency medical care involving an opioid

Taking any opioid by yourself, especially when used the first time, increases the chance that someone will not be around to help if there is an opioid emergency.

HOW TO USE NALOXONE IN AN OPIOID EMERGENCY



A GUIDE FOR PATIENTS AND THEIR FAMILY & FRIENDS

Image changed for each specific medication

Injectable Naltrexone Brochures

Study Methodologies: Injectable Naltrexone

- A review found no existing brochures or materials to describe the benefits of injectable naltrexone and why a community pharmacy was a good treatment location.
- In 2020, an exploratory sequential mixed-methods design was employed to conduct:
 - A descriptive analysis of a pharmacist survey about MOUD and
 - An inductive/iterative content analysis of interviews with pharmacists, prescribers, and community stakeholders.
- In 2021-2022, focus groups were conducted with key referral sources (nurse practitioners and treatment court professionals) to identify benefits of pharmacy provided naltrexone injections to patients, prescribers, referral sources and what to expect at the pharmacy.
- Engaged in iterative feedback regarding brochure content and layout

Pharmacy CP-Naltrexone Brochure

BENEFITS TO THE PATIENT

- Increases access to naltrexone injections and related services
- Flexible scheduling (including evenings and weekends)
- Increases convenience to access services outside of clinic visits
- **Capitalizes on existing trusted relationship with pharmacist**
- Reduces stigma (pharmacy preserves anonymity)
- Minimizes travel
- Makes it easier for patients to stay compliant
- Creates clearer patient expectations
- Creates critical access point for people leaving the criminal justice system
- Assists patients with insurance issues

BENEFITS TO THE PROVIDER

- Reduces client treatment load, especially for stabilized patients
- Flexible patient scheduling (same day treatment is possible)
- Allows for mutual agreement about the clinical information that the pharmacist shares with the provider, such as:
 - ⇒ Patient keeping the appointment
 - ⇒ Urine drug screen results (including screening for agreed-upon substances, including alcohol)
 - ⇒ Injection site delivery and adverse reactions
 - ⇒ Other information as warranted
- Pharmacist is available to answer specific treatment questions (e.g., about medication side effects, withdrawal, etc.)

WHY USE THE PHARMACY?

- ✓ Pharmacists have specialized training on how to provide injections
- ✓ Pharmacists have experience providing naltrexone injections
- ✓ Private consultation rooms are available to maintain patient anonymity
- ✓ Pharmacy has established protocols, including injection delivery and adverse events management
- ✓ Pharmacists can offer medication counseling about naltrexone
- ✓ Pharmacists can conduct a urine drug screen prior to the injection, as needed
- ✓ Public has existing trusted relationship with community pharmacy
- ✓ Pharmacy-provided injectable naltrexone decreases cost burden for the healthcare system

So, I have a lot of trust and faith in our pharmacists in the community, here at the clinic, and in our community itself.

~Interviewed Physician

Pharmacy CP-Naltrexone Brochure

PATIENT EXPECTATIONS

WHAT TO EXPECT AT THE PHARMACY



- The initial patient appointment will take longer to account for activities such as medication counseling and benefits coordination, as needed
-
- The patient will be required to wait approximately 15 minutes after receipt of the injection to monitor for adverse events
- A pharmacist will take time to talk with the patient about injectable naltrexone, including how to monitor for adverse reactions
- The patient will be able to schedule a follow-up appointment with the pharmacist
- The patient can receive a reminder call about subsequent appointments from the pharmacy, as desired
- The pharmacist will coordinate communications about receipt of the injection with the provider and/or, if necessary, the drug court

INJECTABLE NALTREXONE

WHAT IS INJECTABLE NALTREXONE?

Injectable naltrexone (or Vivitrol®) is an **FDA approved medication** for the treatment of an opioid use disorder and alcohol use disorder.

The medication delivery schedule involves monthly injections administered by a trained provider or pharmacist.

To learn more about naltrexone from the Substance Abuse and Mental Health Services Administration, click on the QR code below.



This brochure content was compiled as part of a project supported by the University of Wisconsin-Madison Institute for Clinical & Translational Research to the University of Wisconsin-Madison School of Pharmacy (Dr. Jay Ford, PI). It was created as part of the outreach mission of School of Pharmacy and does not represent an endorsement of any specific commercial product and should not be read to imply a relationship with any manufacturer.

GETTING TO KNOW YOUR PHARMACY

Pharmacist-Provided Injectable Naltrexone

[space for pharmacy logo]

PHARMACY NAME

Street
City, State, Zip

Pharmacist Name
pharmacist email
pharmacist phone

Benefits to Treatment Court Participants

- Increases access to naltrexone injections and related services
- Flexible scheduling (including evenings and weekends)
- Increases convenience to access services outside of clinic visits
- Capitalizes on existing trusted relationship with pharmacist
- Reduces stigma (pharmacy preserves anonymity)
- Minimizes participant travel
- Makes it easier for participants to stay compliant
- Creates clearer participant expectations
- Creates critical access point for people leaving the criminal justice system
- Assists participants with insurance issues

Treatment Court Handout

Community Pharmacy Resources to Mitigate the Effects of Wisconsin's Opioid Crisis

Benefits to Treatment Court Participants

- Increases access to naltrexone injections and related services
- Flexible scheduling (including evenings and weekends)
- Increases convenience to access services outside of clinic visits
- Capitalizes on existing trusted relationship with pharmacist
- Reduces stigma (pharmacy preserves anonymity)
- Minimizes participant travel
- Makes it easier for participants to stay compliant
- Creates clearer participant expectations
- Creates critical access point for people leaving the criminal justice system
- Assists participants with insurance issues

To see the full list of our injectable naltrexone related resources, including a link to the WATCP video, please scan the QR code below.



Exploring the role of community pharmacist-provided injectable naltrexone (Vivitrol®) for treatment court participants.

The increased rates of opioid-related deaths and emergency room visits¹ in Wisconsin underscores the fact that the state's opioid crisis continues to be a major public health issue. The preferred evidence-based treatment for persons with an opioid use disorder (OUD) combines the use of FDA-approved medications for OUD (MOUD) with counseling and behavioral therapies. However, access to MOUD has not kept up with increased demand.

As of 8/31/2021, in WI there have been 835 opioid-related deaths in the year.¹

In Wisconsin, pharmacists are able to provide long-acting injectable naltrexone, an approved and effective MOUD treatment. Pharmacists, who are more geographically accessible, have a unique perspective on what to expect pharmacologically with an OUD medication, and they can proactively follow up with participants once a medication is provided.

Since 2018, the Ford Research Group at the University of Wisconsin-Madison School of Pharmacy, lead by Dr. Jay Ford, has been been researching community pharmacist-provided injectable naltrexone services.

Part of our goal is to understand how community pharmacists can potentially benefit treatment court programs. In 2021, we surveyed and conducted a focus group with treatment court coordinators in Wisconsin. What was evident in our findings was that there was widespread lack of awareness about community pharmacist-provided injectable naltrexone. While many barriers were discussed, coordinators could see the the benefit of this collaboration.

"I think getting pharmacists, especially in rural communities, involved in [MOUD] would be extremely helpful."

~ Treatment Court Coordinator

To further inform treatment court coordinators of this service, we held a joint webinar with the Wisconsin Association of Treatment Court Professionals membership and community pharmacists offering injectable naltrexone. A link to the video of the webinar is available via the QR code to the left.

We hope to further explore this potential collaboration with future research funding.

Questions?

fordresearchgroup@pharmacy.wisc.edu

¹ <https://www.dhs.wisconsin.gov/opioids/dashboards.htm>

Educational Brochure Goals

Naloxone

- Educates patients, family members and caregivers on naloxone use and overdose,
- Prepares them about what to do in case of an overdose, including how to administer naloxone, if needed

Injectable Naltrexone for Providers

- Describe the benefits of pharmacy-delivered naltrexone injections for patients and providers,
- Explains why providers should use the pharmacy and
- Outlines patient expectations when using the pharmacy for this service

Injectable Naltrexone for Treatment Court Coordinators

- Provides information about the opioid crisis and
- Explains the benefits of pharmacy-delivered naltrexone injection to treatment court participants.

Limitations

- Educational brochures were developed with input from selected groups of individuals & content may not reflect informational needs of other individuals.
- Current uptake of the tools is limited
- Outreach tools have not been formally evaluated.

Next Steps

- Develop naloxone education brochures for administration with a suspected fentanyl overdose.
- Systematically broaden availability of the educational outreach tools to community pharmacies including in additional languages.
- Evaluate impact on patient knowledge (naloxone) and increased access to injectable naltrexone services at a community pharmacy.



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Presentation



To access a copy of this presentation please scan the QR code.

Resources – Ford Research Group Website

Community Pharmacy and the Opioid Epidemic Research (summary of our research)

<https://pharmacy.wisc.edu/faculty/ford-research-group/research-project/community-pharmacy-and-the-opioid-epidemic/>

Community Pharmacy-Provided Injectable Naltrexone Best Practices Guide (an online guide for community pharmacists)

<https://pharmacy.wisc.edu/faculty/ford-research-group/resources/injectable-naltrexone-best-practices/>

Injectable Naltrexone Brochure (free download)

<https://pharmacy.wisc.edu/faculty/ford-research-group/online-tools/injectable-naltrexone-brochure/>

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