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# **Academic Detailing to Enhance Overdose Prevention: An Implementation Guide for Organizations**

**Authors: Aleta Christensen, MPH, Bevin K. Amira, Cherie Rooks-Peck, PhD,  
Amber Robinson, PhD, Olga Costa, MPH, April Wisdom, PhD, Kari Cruz, MPH**



**Centers for Disease  
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**Academic detailing is a one-on-one educational method where trained educators deliver evidence-based and tailored messages to encourage behavior change among clinicians to improve patient health outcomes.**

# I. Introduction to Academic Detailing to Affect Opioid Prescribing and this Implementation Guide

## A. Academic Detailing Provides One on One Training for Clinicians

Since 2015, the Centers for Disease Control and Prevention has funded programs that support state health departments in employing strategies to reduce morbidity and mortality from drug overdose. Academic detailing has been a vital component in efforts to improve opioid prescribing by changing opioid prescribing behavior and utilization of prescription drug monitoring programs (PDMP) among physicians [1, 2].

## B. This Implementation Guide Can Help

This guide helps state and local health departments, community organizations, and other program implementers plan, implement, and evaluate academic detailing to support overdose prevention efforts. This document builds upon an implementation guide originally developed by National Resource Center for Academic Detailing (NaRCAD) [3] and provides more detailed descriptions for implementing, adapting, and evaluating an academic detailing program for overdose prevention.

# II. Academic Detailing is a Key Quality Improvement Strategy

## A. Evidence for Academic Detailing for Opioid Overdose Prevention

The key features of academic detailing provide the basis for changing clinician behaviors to enhance patient outcomes. They include one-on-one educational sessions between the academic detailer and the clinician, the relationship built between the detailer and clinician, the key messages provided during a session, and the clinician goals during the visit. Robust academic detailing is focused on

delivering evidence-based clinical messages and starts with evidence-based guidelines or research. A prominent academic detailing strategy has been to focus on promoting opioid prescribing practices that are concordant with such guidelines (e.g., 2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain) [4] or those created by states, localities, or professional organizations.

Key messages can be framed around opioid-specific guideline recommendations and grouped into four areas, for example [4]:



Determining whether or not to initiate opioids for pain



Selecting opioids and determining opioid dosages



Deciding duration of initial opioid prescription and conducting follow-up



Assessing risk and addressing potential harms of opioid use

## B. Effects of Academic Detailing on Opioid Prescribing Knowledge, Behavior and on Patient Outcomes

Interventions that include academic detailing have shown:

- Improved clinician adherence to guidelines for monitoring patients treated with long-term opioid therapy for chronic pain and increased opioid treatment discontinuation [5]
- Improved toxicology testing [1, 5-6] and percentages of patients with up-to-date treatment agreements on opioid therapy [5]
- Improved clinician knowledge about opioid prescribing recommendations [7]
- Decreased rates of high-dose opioid prescribing [7] and opioid-benzodiazepine co-prescriptions [5]
- In other studies, clinicians who conceptualize naloxone in the context of opioid safety after receiving academic detailing visits were more likely to prescribe naloxone [8, 9] and to have patients fill a prescription for it [10]. For more literature on the benefits of academic detailing, a comprehensive library of academic detailing literature is available online [11].

## III. Structure of a 1:1 Detailer-to-Clinician Visit

Academic detailing is a highly interactive approach used to educate clinicians on evidence-based information and strategies to change opioid prescribing behavior and other therapeutic decisions. As such, it requires structured communication that focuses on a continuous dialogue and individualized assessment of clinician needs. This type of structured communication is also used by pharmaceutical industry sales representatives, but rather than prioritizing pharmaceutical sales, academic detailing to address opioid prescribing and PDMP utilization

offers a service to frontline clinicians to improve their ability to provide evidence-based care for patients with opioid use disorder (OUD).

Each academic detailing visit is unique, which requires adaptability on the part of detailers. This is especially true during the first meeting with a clinician. Detailers have a limited amount of time to provide a sense of structure, elicit a dialogue through needs assessment, employ active listening, and deliver key messages that are tailored to that clinician's needs.

The steps of an academic detailing visit include:



Introduction



Needs Assessment



Key Messages,  
Features, and Benefits



Barriers and  
Objections



Summary  
and Close

### A. Introduction

The introduction is generally brief but is one of the most important parts of an academic detailing visit: it sets the tone of the visit, conveys a sense of purpose, and can lay the foundation for future visits. It provides the detailer's name, credentials, and organizational affiliations; the area of clinical and patient focus; and confirms the agreed upon amount of time allotted for the visit.

### B. Needs Assessment

An effective academic detailer will continuously assess the clinician's needs to understand the practice and the clinician's own knowledge, beliefs, attitudes, issues, and concerns related to opioid prescribing and utilization of PDMPs. To establish a productive conversation, detailers primarily use open-ended questions and give the clinician an opportunity to share experiences, challenges, and needs.

### C. Key Messages, Features, and Benefits

Key messages are action-based, relevant, evidence-informed, compelling, and succinct. They can be linked to graphically engaging educational materials that illustrate the evidence supporting adoption of the recommended behavior. Key messages are developed based on research findings that support

the recommended actions. An effective key message will clearly link the evidence from the research to the recommended behavior and to the direct patient and clinician impact. Detailing programs typically develop 3-5 key messages per topic that are designed to lead to additional benefits for the patients and the clinician, leading to adoption of additional or more refined behaviors.

## Key messages based on the 2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain (the evidence)



Each message offers a behavior change for the prescriber that aligns with the guidelines.

1. Maximize use of nonpharmacologic and nonopioid pharmacologic therapies for acute, subacute, or chronic pain
2. If benefits of starting opioid therapy are anticipated to outweigh risks to the patient, discuss realistic benefits and known risks, establish treatment goals and function, and prescribe immediate-release opioids instead of extended-release/long-acting opioids
3. When opioids are initiated for opioid-naïve patients with acute, subacute, or chronic pain, clinicians should prescribe the lowest effective dosage
4. Review the patient's history of controlled substance prescriptions using state PDMP data to determine whether the patient is receiving opioid dosages or combinations that put the patient at high risk for overdose
5. Use particular caution when prescribing opioid pain medication and benzodiazepines concurrently
6. Offer or arrange treatment with evidence-based medications to treat patients with OUD

## D. Barriers and Objections

Clinicians will often voice concerns when considering a key message. Barriers are specific obstacles to potential implementation of a key message and illustrate that a clinician is engaged in the conversation. Barriers may include a lack of understanding of the issue, fear that change means more work, lack of recognition of the need for change, or misunderstanding what was communicated.

Objections generally reflect a more fundamental conceptual problem with the approach suggested by the academic detailer, or a genuine disagreement with the content of a key message. When objections arise, academic detailers can ask further needs assessment questions to better understand the clinician's perspective and to seek common ground for collaborative solutions.

## E. Summary and Close

In the final steps of the visit, the summary can be as succinct as the opening introduction. A detailer can use this opportunity to clearly review the key messages discussed and ensure that all key concerns have been covered. The role of the summary is to have

the clinician acknowledge the key messages covered and agreed to during discussion.

The close is the final step of the visit when clinicians are asked to commit to implementing the key messages and associated practice recommendations. It is best practice that any agreed-upon commitments to change are measurable, realistic, and supported by the detailer who will tailor additional support and follow-up to the needs of the clinician to ensure adoption is sustainable.

## F. Follow-up

Follow-up is an important element of relationship-building and increases the likelihood of behavior change. The goal of an academic detailer is to help the practitioner adopt as many of the recommended behaviors as possible, which often requires multiple visits. Follow-up visits allow academic detailers to assess how, and if, changes are being implemented, to reinforce key messages, and to address new concerns or additional topics.

A demonstration video of an academic detailing session can be found at <https://www.narcad.org/webinar-series.html>



## IV. HOW TO DEVELOP A SUSTAINABLE ACADEMIC DETAILING PROGRAM TO AFFECT OPIOID PRESCRIBING

While some academic detailing programs are structured as pilots or feasibility studies with limited funding, sustainable programming can have a lasting impact and maintain long-term clinician behavior change. The academic detailing model emphasizes interactive

relationship building and indicates that consistent in-person and supplemental contact (e.g., email, phone, etc.) is critical over the course of a longer-term relationship.

Although academic detailing interventions with only one in-person visit may effect change, integrating detailing as a continuous reliable service for clinicians can result in adopting the desired changes in opioid prescribing and PDMP utilization over time. This is especially true with complex clinical topics such as opioid prescribing so that new evidence-based key messages, tools, and resources can be provided consistently to clinicians over time rather than synthesized into one consolidated visit.

## A. Understand the Local Context

### 1. Setting and Environmental Scan

It is important to consider the many aspects of the community where the detailing will occur. Understanding the overdose epidemic in a particular jurisdiction is essential to developing and tailoring program materials. In addition, identifying key collaborators can increase program support and sustainability. Collaborators may include community, state, and federal partners. Understanding substance-use related stigma in the community can provide important context that detailers can use to tailor messaging and to approach clinicians. Treatment availability, treatment options, and patient access significantly vary between communities and will influence which program materials and resources detailers can share with clinicians.

### 2. Patient Population

Using data to identify the patient population and potential subpopulations whose care needs are not being met and would benefit from evidence-based care provided by trusted clinicians is important. Detailing programs can examine prescribing behaviors amongst clinicians in health systems across a jurisdiction to assess adherence to opioid prescribing guidelines, as well as access to nonpharmacologic therapy and treatment. A wider cross-section of all available data will ensure that patient populations with the greatest need can be targeted with academic detailing messages. Data sources to consider include:

- PDMP data
- Drug use and misuse trends (e.g., prescribed, nonprescribed and illicit)
- Overdose trends
- Electronic health records
- Hospital billing data
- State death certificate data

## B. Define Goals and Outcomes at the Start

The goal of academic detailing is that a clinician agrees to implement specific behavior changes based on guidance from an academic detailer. While busy clinicians benefit greatly from a skilled detailer providing a synthesis of the best evidence, they are unlikely to change attitudes or behaviors simply from receiving an evidence summary, without also committing to adopting a new or different behavior around prescribing, screening, or patient education.

Framing the relationship and visits between clinicians and academic detailers using a lens focused on improving patient health can help to realize program goals. This will not only provide clinicians with the evidence (the “what”), but it will also provide the tools to apply the evidence to care (the “how”) in ways that will benefit patients and improve outcomes.

### 1. Identify Which Clinicians to Visit

#### *Clinician Profiles*

Identifying an appropriate subset of clinicians to whom key messaging can be delivered is important to an intervention’s success. The ideal target clinician population is directly connected to the sought behavior changes for the intervention.

When safer opioid prescribing or increased access to medications for opioid use disorder (MOUD) is the goal of a detailing program, consider engaging primary care and emergency department clinicians. Other clinician types (e.g., dentists, nurses, surgeons) can be considered based on the environmental scan and goals of the program.

#### *Reaching Clinicians for Academic Detailing*

Assessing and planning access to the various settings of clinicians is equally integral to intervention success. Clinical structure, staffing numbers, and geography may be considered as they may impede or enable efforts. Such factors may be carefully examined prior to implementation to determine the overall number of clinicians to reach as well as the feasibility of multiple visits with each clinician.



### ***Practice Setting and Access***

Carefully consider detailing team factors such as staffing, resources, and a timeline in which to implement a field intervention when identifying clinicians to receive detailing sessions. Gaining access to clinicians within a larger clinic or health system may require leveraging pre-established relationships and may yield more 1:1 visits, enabling detailers to schedule more subsequent sessions with other clinicians within those clinics or health systems. Smaller, family-run practices with fewer clinicians may provide an easier initial access point but yield fewer sessions with additional clinicians.

### ***Geography***

When considering geography and community socioeconomic factors, dense urban areas may have more clinics with multiple clinicians on staff, easier detailer access to those clinicians via public transportation or minimal driving time, and clinicians with a larger patient panel that may include more patients with OUD.

Conversely, rural areas may contain fewer smaller-scale primary care practices with fewer clinicians to whom a detailing service is directed; likewise, patients in rural areas may have less access to public transportation or may attend appointments less frequently due to travel limitations. Detailers themselves may, in kind, need more resources to make visits to clinicians in rural

areas where there is a greater distance to travel to appointments, or be less able to see multiple clinicians due to lower clinician staffing and a greater distance between rural clinics. Therefore, realistic planning and appropriate staffing are critical to define at the beginning of an intervention.

### ***Considerations and Opportunities: Gaining Access to Clinicians***

The following tools are recommended for gaining access to clinicians:

- Public health department-endorsed letters signed and distributed through pre-established health system networks;
- Preliminary emails introducing the project ahead of visits;
- Regular and persistent phone calls to schedule 1:1 visits using a predetermined script for calls with clear and engaging introductory language;
- Cold call in-person visits with practice managers and/or receptionists;
- Leveraging pre-existing relationships and asking for introductions from other known clinician “champions”; and
- Meeting with clinicians as a group during the initial visit to gain access to a shorter staff meeting (after which 1:1 visits can be scheduled with interested clinicians).



## 2. Plan an Opioid Safety Intervention: Areas for Identification and Consideration

Information about planning your academic detailing intervention can be found in the tables below. Important elements for implementing academic detailing can be found in the [Academic Detailing Evaluation Profile](#).

Planning Area	Elements to Incorporate
<p><b>Area 1: Intervention Planning</b></p> <p>Identify a patient-specific gap in care; choose specific clinical focus areas to promote behavior change.</p>	<ul style="list-style-type: none"><li>• Data sources used to determine areas of need (e.g., prescription drug dispensing trends)</li><li>• Opioid overdose prevention-related gaps in care</li><li>• Sources that inform the development of opioid prescribing related detailing materials</li><li>• Detailing materials to be developed or adapted, including key messages</li><li>• Community partners and other collaborators</li><li>• Needs assessment questions to ask clinicians</li><li>• Detailing staff to be trained</li><li>• Training plan and timeline</li></ul>
<p><b>Area 2: Clinician Audience Selection</b></p> <p>Identify clinicians for behavior change messaging; determine local context for applying intervention.</p>	<ul style="list-style-type: none"><li>• Location/geography for intervention</li><li>• Types of practice (e.g., primary care, specialty, dental, etc.)</li><li>• Potential number of clinicians to receive detailing</li><li>• Other local interventions or related resources (including complementary or competing)</li></ul>
<p><b>Area 3: Field Visit Indicators</b></p> <p>Identify metrics to collect and track 1:1 visit interactions and data.</p>	<ul style="list-style-type: none"><li>• Type of visit (i.e., initial visit vs. return visit)</li><li>• Number of outreach visits completed; percent of targeted clinicians reached</li><li>• Number of minutes spent per visit in direct academic detailing</li><li>• Key messages delivered</li><li>• Commitment to behavior change agreed upon</li><li>• Follow-up metrics (e.g., number of visits that had follow-up scheduled, format of follow-up, etc.)</li><li>• Resources requested and delivery format</li></ul>
<p><b>Area 4: Outcome and Evaluation</b></p> <p>Metrics identify how to implement an evaluation on prescriber and patient related outcomes.</p>	<ul style="list-style-type: none"><li>• Evaluation of clinician attitudes (via survey) and satisfaction</li><li>• Self-reported increase in clinician knowledge</li><li>• Changes in clinical care processes</li><li>• Changes in use (decrease or increase) of recommended behavior (e.g., screening, referrals, prescribing)</li><li>• Changes in patient outcomes (feasibility will depend on availability of relevant data and on determining time frame for changes in these outcomes)</li></ul>

## C. Train and Prepare Detailers

### 1. Recruitment: Critical Skills for Potential Detailers

Once recruited, training is critical to ensure that detailers are well-versed in both the clinical content and in the persuasive communications techniques of social marketing, the latter of which is adapted from traditional pharmaceutical marketing approaches.

#### Skills and Abilities of Ideal Academic Detailers

##### Communication Skills

Ideal detailers will have all of the following skills:

- Excellent written skills for documentation and team communication
- Excellent social and interpersonal skills
- Ability to execute interactive adult learning sessions
- Excellent public speaking/persuasive verbal communication skills
- Comfort in speaking across disciplines and contexts
- Experience in communicating medical education or clinical content
- Cultural sensitivity and inclusivity
- Understanding of patient population and related needs/challenges
- Proficiency in communication related to technology
- Knowledge of person-first language

##### Professional Background

Ideal detailers will have one or more of the following backgrounds:

- Prior training, experience, or foundation in the clinical content about opioids
- Public health, medicine, nursing, pharmacy, or other clinical background
- Sales
- Experience or training in motivational interviewing
- Graduate studies in a clinical discipline

##### Resources to Devote to Project

Ideal detailers will have:

- Availability for regular calls or check-ins
- Time to update reporting sheets (individual tracking and master tracking sheets)
- Time to make approximately 1 visit per week at minimum, or other agreed-upon frequency (typically determined in partnership with the clinician, but a minimum of 2–3 is recommended)
- Flexibility to make visits outside of working hours/other commitments



## 2. Communication Techniques

For academic detailing programs focused on opioid prescribing, detailers can be trained by subject matter experts in opioid prescribing and overdose prevention to ensure that they are prepared to discuss the best evidence and related content about opioid prescribing and overdose prevention with frontline clinicians. (See Additional Resources for training program resources and opportunities).

Similarly, academic detailing communication techniques taught by experts in the field of social marketing may help improve the quality of training efforts. Training includes role play with experienced detailers who can serve as facilitators in replicating a real-world, 1:1 clinical encounter. Trainees will be best prepared for field work when they can practice communication techniques through role play sessions; video recorded practice sessions are highly recommended for review and critique.

## 3. Content Related to Overdose Prevention Interventions:

- Community stigma and perceptions of opioid prescribing and overdose prevention
- Local resources that are available or lacking
- Other concurrent interventions, including those related to supporting disproportionately affected populations through various initiatives such as access to care and transportation, and harm reduction
- Geographic challenges, including terrain and transportation
- Treatment availability and options within the community
- Clinic features, including size, ease in scheduling/ access, availability of clinicians, and type of clinician (e.g., licensed social workers or addiction counselors may be considered important clinicians to whom to direct outreach education visits, along with

primary care, emergency departments, etc. when considering community-wide interventions of which academic detailing is one factor/approach.)

## 4. Consistent Detailer Support: Regular Peer-to-Peer Calls

Monthly calls between detailers and their program staff can be scheduled during the phase of the project when field work is occurring for opportunities to discuss troubleshooting, trends, and to receive peer support.

Peer support and building confidence is a key component of success, as well as providing regular opportunities to discuss clinical content related to opioid prescribing and discussing any training needs for additional clinical content on opioid prescribing and overdose prevention.

## 5. Detailing Team Size

The size of detailing teams can be adapted to reflect the available needs, goals, and resources of the program. Established programs range from one detailer to up to 20. Territory and geographical size, and number of clinics and clinician visits, are also considerations that will impact a program's team size. Even programs with fewer detailers can make a sizeable impact if those detailers can make multiple weekly visits and have the appropriate resources and support. This support may come in the form of technical assistance provided to detailers and is based on the academic detailing model, which encourages relationship-building and ongoing visits over the course of the intervention.

In addition to building a team of detailers, additional program staff can be identified based on program resources and staff availability. They may include a program manager, administrative personnel for scheduling and data collection, evaluation staff, and any data specialists.

## D. Deliver the Campaign

### 1. Key Messaging and Corresponding Educational Materials

It is best practice to deliver key messaging with the support of relevant educational materials. This includes detailing aids with graphically engaging content that synthesize local data and provide recommended behavior changes. Materials are

essential for engaging diverse learning styles and for encouraging the adoption of behaviors when presented to clinicians and shared with colleagues.

### 2. Examples of Action-based Key Messaging to Support Communication between Clinicians and Patients and Improve Person-Centered Decisions Related to Pain Care

## 2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain

### Determining Whether or Not to Initiate Opioids for Pain (Recommendations 1 and 2)

1. Nonopioid therapies are at least as effective as opioids for many common types of acute pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider opioid therapy for acute pain if benefits are anticipated to outweigh risks to the patient. Before prescribing opioid therapy for acute pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy (recommendation category: B; evidence type: 3).
2. Nonopioid therapies are preferred for subacute and chronic pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider initiating opioid therapy if expected benefits for pain and function are anticipated to outweigh risks to the patient. Before starting opioid therapy for subacute or chronic pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy, should work with patients to establish treatment goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks (recommendation category: A; evidence type: 2).

### Selecting Opioids and Determining Opioid Dosages (Recommendations 3, 4, and 5)

3. When starting opioid therapy for acute, subacute, or chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release and long-acting (ER/LA) opioids (recommendation category: A; evidence type: 4).
4. When opioids are initiated for opioid-naïve patients with acute, subacute, or chronic pain, clinicians should prescribe the lowest effective dosage. If opioids are continued for subacute or chronic pain, clinicians should use caution when prescribing opioids at any dosage, should carefully evaluate individual benefits and risks when considering increasing dosage, and should avoid increasing dosage above levels likely to yield diminishing returns in benefits relative to risks to patients (recommendation category: A; evidence type: 3).
5. For patients already receiving opioid therapy, clinicians should carefully weigh benefits and risks and exercise care when changing opioid dosage. If benefits outweigh risks of continued opioid therapy, clinicians should work closely with patients to optimize nonopioid therapies while continuing opioid therapy. If benefits do not outweigh risks of continued opioid therapy, clinicians should optimize other therapies and work closely with patients to gradually taper to lower dosages or, if warranted based on the individual circumstances of the patient, appropriately taper and discontinue opioids. Unless there are indications of a life-threatening issue such as warning signs of impending overdose (e.g., confusion, sedation, or slurred speech), opioid therapy should not be discontinued abruptly, and clinicians should not rapidly reduce opioid dosages from higher dosages (recommendation category: B; evidence type: 4).

## Deciding Duration of Initial Opioid Prescription and Conducting Follow-Up (Recommendations 6 and 7)

6. When opioids are needed for acute pain, clinicians should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids (recommendation category: A; evidence type: 4).
7. Clinicians should evaluate benefits and risks with patients within 1–4 weeks of starting opioid therapy for subacute or chronic pain or of dosage escalation. Clinicians should regularly reevaluate benefits and risks of continued opioid therapy with patients (recommendation category: A; evidence type: 4).

## Assessing Risk and Addressing Potential Harms of Opioid Use (Recommendations 8, 9, 10, 11, and 12)

8. Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk for opioid-related harms and discuss risk with patients. Clinicians should work with patients to incorporate into the management plan strategies to mitigate risk, including offering naloxone (recommendation category: A; evidence type: 4).
9. When prescribing initial opioid therapy for acute, subacute, or chronic pain, and periodically during opioid therapy for chronic pain, clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or combinations that put the patient at high risk for overdose (recommendation category: B; evidence type: 4).
10. When prescribing opioids for subacute or chronic pain, clinicians should consider the benefits and risks of toxicology testing to assess for prescribed medications as well as other prescribed and nonprescribed controlled substances (recommendation category: B; evidence type: 4).
11. Clinicians should use particular caution when prescribing opioid pain medication and benzodiazepines concurrently and consider whether benefits outweigh risks of concurrent prescribing of opioids and other central nervous system depressants (recommendation category: B; evidence type: 3).
12. Clinicians should offer or arrange treatment with evidence-based medications to treat patients with opioid use disorder. Detoxification on its own, without medications for opioid use disorder, is not recommended for opioid use disorder because of increased risks for resuming drug use, overdose, and overdose death (recommendation category: A; evidence type: 1).

**Recommendation categories** (on basis of evidence type, balance between desirable and undesirable effects, values and preferences, and resource allocation [cost]).

- **Category A recommendation:** Applies to all persons; most patients should receive the recommended course of action.
- **Category B recommendation:** Individual decision-making needed; different choices will be appropriate for different patients. Clinicians help patients arrive at a decision consistent with patient values and preferences and specific clinical situations.

**Evidence types** (on basis of study design and as a function of limitations in study design or implementation, imprecision of estimates, variability in findings, indirectness of evidence, publication bias, magnitude of treatment effects, dose-response gradient, and constellation of plausible biases that could change effects).

- **Type 1 evidence:** Randomized clinical trials or overwhelming evidence from observational studies.
- **Type 2 evidence:** Randomized clinical trials with important limitations, or exceptionally strong evidence from observational studies.
- **Type 3 evidence:** Observational studies or randomized clinical trials with notable limitations.
- **Type 4 evidence:** Clinical experience and observations, observational studies with important limitations, or randomized clinical trials with several major limitations.



### 3. Data Collection During Intervention Delivery

After training sessions are completed and detailers are prepared to implement 1:1 clinical outreach education visits with clinicians, accurately recording visit data can inform a robust evaluation.

Real-time data tracking can be accomplished by collecting standard visit-specific data:

- Type of visit (e.g., individual, small group, initial visit vs. return visit)
- Number of outreach visits completed; percent of targeted clinicians reached
- Number of minutes spent per visit in direct academic detailing
- Type of key messages delivered
- Specific commitment to behavior change that was agreed upon
- Follow-up metrics (e.g., number of visits with scheduled follow-up, format of follow-up, etc.)
- Resources requested and delivery format
- Preferred communication format for follow-up contact

Some example formats for this data collection, including prescriber self-assessment of commitment to behavior change, can be found in Additional Resources.

of a program that can be modified or enhanced without compromising the core components”—is also paramount [12]. The key communication techniques of academic detailing can be maintained, even when program implementation veers away from the original model of academic detailing.

For example, in-person visits are not always feasible due to geography or safety concerns (for example, COVID-19 created access restrictions). Virtual visits, also known as “e-Detailing,” can be used if access to clinics is limited. Such visits build rapport with the clinicians, and have been used increasingly to retain the personalized, interactive engagement of an in-person visit. Using virtual technologies strategically to mimic in-person sessions provides program implementers with a cost-saving innovation that has the potential to increase the reach of an academic detailing program.

Academic detailing sessions are interactive, provide tailored messaging, and emphasize relationship-building. While these characteristics are needed to maintain fidelity, program implementers can adapt academic detailing programs to accommodate specific program needs and scale based on available resources. Any adaptations can be documented and evaluated, as there are gaps in the literature around the impact of modified academic detailing programs on opioid prescribing and overdose prevention.

## V. Adaptations

The body of literature around opioid-related academic detailing indicates that it can be successfully delivered to different types of clinicians with varying patient populations. Delivery of academic detailing is carried out by trained clinical educators. Academic detailing is centered on a 1:1, in-person approach, both of which are critical to leverage the motivation for behavior change.

When implemented with fidelity, academic detailing interventions are delivered in a way that is “consistent with underlying program theory and reflects the developer’s intentions [12].” However, the context and challenges of implementation vary across programs and so flexibility—that is, “the elements

## VI. Successful Implementation and Evaluation

When implementing an academic detailing program, there are several key characteristics that can be considered. These key characteristics of an academic detailing program can be grouped into four domains: Health Department Leadership and Support, Local Integration and Network, Detailer Skills and Experience, and Communication and Learning. In addition, evaluation is an integral tool to ensure an academic detailing program is being implemented successfully. In this section, we describe the key characteristics needed for successful implementation, as well as resources, tools, and indicators for evaluating the program.

## A. Factors Important for Implementing a Successful Detailing Program

Domain	Key Implementation Characteristics
<b>Health Department Leadership and Support</b>	<ul style="list-style-type: none"> <li>• Prioritization/time commitment</li> <li>• Recruitment of detailers</li> <li>• Engagement of partners and collaborators</li> </ul>
<b>Local Integration and Network</b>	<ul style="list-style-type: none"> <li>• Connections to hospital/practice systems</li> <li>• Links to relevant clinicians</li> <li>• Identification of potential problems</li> </ul>
<b>Detailer Skills and Experience</b>	<ul style="list-style-type: none"> <li>• Pace of skills acquisition</li> <li>• Comfort with communication/education</li> <li>• Ability to engage with clinicians</li> </ul>
<b>Communication and Learning</b>	<ul style="list-style-type: none"> <li>• Engagement with external resources</li> <li>• Peer-to-peer feedback and support</li> <li>• Adoption of successful strategies</li> <li>• Troubleshooting challenges</li> </ul>

## B. Barriers and Facilitators to Successful Implementation

Facilitators	Successful Implementation	Less Successful Implementation
<b>Strong Leadership</b> within the local health department	Building stronger teams via excellent recruitment and consistent involvement	Less effective recruiting decisions and less connected teams
<b>Pre-Existing Connections</b> to clinicians, systems, and networks in the local community	More efficient implementation and stronger buy-in from community	Harder to gain initial access for visits or buy-in from community
<b>Balanced Trainee Skill Set</b> (clinical knowledge + excellent communication skills)	Can be flexible and more effective in connecting with clinicians	Harder to answer specific questions or to determine how to support clinicians
<b>Regular Team Communication</b> between team detailers and program	Understanding of individual roles; increased group morale and support	Gaps between visits and support, isolated detailers
<b>Ongoing Learning Opportunities</b> via peer-to-peer networking and clinical content refreshers	Chances to share successes and to request assistance with challenges; increased knowledge of clinical information	Less connection to strategies and support; limited knowledge on clinical content updates



## C. Evaluation of Academic Detailing Programs

Evaluation is a tool that program implementers can use to ensure that high-quality programs are developed and maintained, and that they produce the desired outcomes. It can also help program implementers make necessary changes over time to their academic detailing program (e.g., develop new key messages or expand implementation in a given region or clinician group).

1. The CDC Logic Model for Overdose Prevention-Focused Academic Detailing is a logic model with a graphic depiction

### Logic Model Academic Detailing (AD)

#### Inputs

##### **Resources**

- CDC Prescribing Guideline,<sup>1</sup> best practices, and current literature related to evidence-based practices for prescribing opioids
- Examples or lessons learned from existing AD programs like Opioid Safety & Stewardship in Detailing Directory of NaRCAD<sup>2</sup>
- NaRCAD's Academic Detailing Toolkit for Opioid Safety<sup>3</sup>
- CDC technical assistance and funds

##### **Data**

- Drug use and misuse trends (e.g., prescription and illicit), prescribing data from Prescription Drug Monitoring Program (PDMP), and overdose trends
- Needs assessments of clinician and/or patient populations (e.g., high risk populations)
- Data management plan<sup>4</sup>

##### **Partnerships**

- Local or jurisdictional partners (e.g., coalitions, harm reduction, clinicians, health systems and payers)
- Schools of medicine, pharmacy, and nursing, and professional licensing boards or associations
- AD experts or consultants

#### Activities

##### **Planning for AD**

- Identify intended audience (e.g., doctors, nurses, dentists) using available baseline data<sup>5</sup>
- Develop or refine key messages based on program or population needs and policy changes<sup>6</sup>
- Recruit and train detailers
- Identify and develop primary materials to support key messages
- Set detailing goals (# of targeted clinicians, # of detailing sessions)

##### **Implement AD**

- Schedule initial sessions with identified clinicians
- Deliver key messages tailored to clinician needs and behavior change goals
- Follow up on key messages and behavior change goals
- Provide additional sessions/resources, as needed
- Collect data on all detailing visits

##### **Monitor and Evaluate AD**

- Monitor program for improvement and identify changes
- Share evaluation findings
- Reassess AD program and refine as needed

#### Outputs

##### **Planning**

- Intended audience identified
- AD key messages developed/refined based on needs and goals
- Detailers recruited and trained
- AD materials determined and created
- AD program goals established

##### **Implementation**

- AD sessions scheduled with clinicians, and key messages delivered and tailored to clinician needs and goals
- Follow-up on progress to achieve behavior change
- Additional detailing sessions/resources provided, as needed
- Data collected on detailing visits

##### **Monitor and Evaluate**

- Program monitored and improvements made
- Evaluation findings shared routinely with stakeholders
- AD goals and key messages refined

## Short-Term Outcomes

### **Systems/Community Changes**

- Increased understanding among collaborating healthcare partners of existing efforts to provide education and skill building for clinicians

### **Individual Level**

- Increased prescriber knowledge of key messages<sup>7</sup>
- Improved prescriber attitudes based on key messages (e.g., decreased stigma surrounding SUD)
- Increased prescriber self-efficacy and intention to change behavior based on key messages<sup>8</sup>

## Intermediate-Term Outcomes

### **Systems/Community Changes**

Changes to clinic or healthcare system's practices and/or policies that align with key messages/best practices (e.g., prescribing opioids, managing pain, treatment)

### **Behavioral Changes**

#### **Prescribers**

Changes in prescriber behavior based on key messages

*For example:*

- Increased registration and use of PDMP
- Decreased high-risk opioid prescribing
- Increased naloxone co-prescribing
- Decreased co-prescribing of opioids and benzodiazepines

Increased discussions of nonopioid medications and nonpharmacologic pain treatment options for patients with chronic pain<sup>7</sup>

#### **Patients**

Increased use of nonopioid medications and/or nonpharmacologic treatments for pain

## Long-Term Outcomes

### **Morbidity**

Decreased rate of opioid misuse, opioid use disorder, or nonfatal overdose

### **Mortality**

Decreased drug overdose death rate, including prescription and illicit opioid overdose death rates

1. For more information, read [CDC's Prescribing Guidelines](#) and [perspective on safer opioid prescribing](#).

2. For the complete [Detailing Directory of NaRCAD](#).

3. For [NaRCAD's Academic detailing Toolkit for Opioid Safety](#).

4. CDC requires recipients who collect or generate data with federal funds to develop, submit, and comply with a data management plan (DMP) for each collection or generation of public health data undertaken as part of the award and, to the extent appropriate, provide access to and archiving/long-term preservation of collected or generated data. For more information, please see [CDC's DMP policy](#).

5. Intended audiences can be identified from prescribing data in the Prescription Drug Monitoring Program (PDMP), morbidity/mortality data, needs assessments of clinicians, or changes to policies effecting specific specialties.

6. AD key messages may be developed to cover a variety of topics based on changes to licensing board requirements, changes to the PDMP, prescribing policy changes in a given jurisdiction or health system/payer, needs assessments of clinicians or patients (e.g., with SUD or chronic pain), etc.

7. AD key messages can cover a variety of topics, including general use and navigation in the PDMP; tapering options; how to discuss nonopioid medications and nonpharmacologic pain treatment options for chronic pain; coprescribing of naloxone; providing care for people with SUD or chronic pain; decreasing stigma surrounding SUD, etc.

8. For more information, see [Guideline Resources: Clinical Tools](#).

## 1. CDC Academic Detailing Evaluation Profile

A sample of evaluation questions and indicators of the types of outcomes academic detailing programs may want to monitor over time are listed below. Please note that the ones included in this section are from [CDC's Evaluation Profile for Academic Detailing](#). A complete list of sample processes and outcome evaluation questions, indicators, and data sources are outlined there.

Sample evaluation question and indicators that can help to assess **individual level outcome changes**:

- For whom, and in what ways, did individual-level changes (e.g., knowledge, skills, intention, self-efficacy, behavior) occur based on academic detailing sessions?

### Short-Term

#### *Clinicians*

- Changes in clinician knowledge of academic detailing key messages (e.g., knowledge of nonopioid therapies, PDMP use, tapering guidance, co-prescribing of naloxone, OUD)
- Changes in clinician attitudes based on academic detailing key messages (e.g., increased focus on person-centered decisions related to pain care, decreased stigma surrounding substance use disorder)
- Changes in clinician self-efficacy and intention to enact changes based on academic detailing key messages (e.g., improved confidence in appropriately implementing recommendations and communicating benefits and risks of opioid therapy)

### Intermediate-Term

#### *Clinician Prescribing*

Behavior changes made based on academic detailing may include:

*Note: Clinicians' behavior change goals are often set at the end of academic detailing sessions. Evaluators may use these measures in a pre-post comparison to assess clinician behavior change.*

- Total number of opioid prescriptions per clinician reported monthly or quarterly

- Percentage of opioid prescriptions per clinician
  - » Percent of opioid prescriptions can be displayed in PDMPs as an average of a clinician's patients receiving opioids and an average of opioid prescriptions written by a given clinician. These percentages may also be displayed based on morphine milligram equivalent (MME) dosage such as 0–50, 51–90, 91–200, and > 200.
- Average number of opioid prescriptions per month or quarter
- Average MME per patient [13]
- Average MME/day per prescription [13]
- Percentage of patients receiving more than an average daily dose of  $\geq 90$  MME of opioids (PDMP measure)
- Average days' supply per opioid prescription [13]
- Percentage of patients with overlapping opioid and benzodiazepine prescriptions [13]

New opioid prescriptions<sup>1</sup>[14]:

- Percentage of patients with a new opioid prescription who have documentation that a PDMP was checked prior to prescribing
- Percentage of patients with a new opioid prescription for subacute or chronic pain who have documentation that a toxicology test was performed prior to prescribing
- Percentage of patients who had a follow-up visit within 4 weeks of starting opioids for subacute or chronic pain or of dose escalation
- Percentage of patients with a new opioid prescription for acute pain for a 3 days' supply or less
- Percentage of patients with a new opioid prescription for an immediate-release opioid

Long-term opioid therapy<sup>2</sup> :

- Percentage of patients on long-term opioid therapy who have a follow-up visit every 90 days
- Percentage of patients on long-term opioid therapy who received a prescription for a benzodiazepine
- Percentage of patients on long-term opioid therapy who have at least quarterly pain and functional assessments

<sup>1</sup>New opioid prescription indicators are meant to be applied at the health system level to track system-level implementation of Guideline recommendations, not to measure individual clinician performance.

<sup>2</sup>Long-term opioid therapy indicators are meant to be applied at the health system level to track system-level implementation of Guideline recommendations, not to measure individual clinician performance.

- Percentage of patients on long-term opioid therapy who have documentation that a PDMP was checked at least every 90 days
- Percentage of patients on long-term opioid therapy who the clinician counseled on the risks and benefits of opioids at least annually
- Percentage of patients on long-term opioid therapy who have documentation that a toxicology test was performed at least annually
- Percentage of patients with acute, subacute, and chronic pain who had at least one referral to non-pharmacologic therapy as a treatment for pain
- Percentage of patients on long-term opioid therapy who are prescribed naloxone
- Percentage of patients with OUD who are prescribed or referred for medication treatment for OUD

#### Patients

- Changes in use of opioid medication (increase in nonopioid medications and/or nonpharmacologic treatments for pain)

Sample evaluation question and indicators that can help to assess **individual level outcome changes**:

- To what extent did the academic detailing program produce or contribute to the intended **community and system (e.g., healthcare and public health) outcomes**?

#### Short-Term

- Increased understanding among stakeholders of existing efforts to provide education and skill-building for clinicians/health systems

#### Intermediate-Term

- Changes over time to clinic or system's practices and/or policies (e.g., policies or practices related to opioid prescribing/tapering, co-prescribing naloxone, nonopioid and nonpharmacologic use/referral for treatment for pain)

## VII. ADDITIONAL RESOURCES

### Academic detailing webinar series

Opioid Safety Academic Detailing Webinar Series: [NaRCAD Recorded Session Archives](#)

### Center for Innovation in Academic Detailing on Opioids

A learning hub for innovative training and technical assistance supporting clinicians in providing compassionate chronic pain and opioid management: [ciaosf.org](http://ciaosf.org)

### Virtual detailing sessions: support and implementation

Pivoting to e-Detailing: a Virtual Approach: [NaRCAD e-Detailing Toolkit](#)

- [E-Detailing Demonstration Video](#)
- [E-Detailing FAQs](#)

- [E-Detailing Checklist](#)
- [Introductory Webinar: The Impact of Academic Detailing](#)
- [E-Detailing Overview Webinar](#)

### Data Collection Tools and Resources

- o Planning and Tracking Your Visits: [Form for Logging Practice Visits and Follow-Up](#)
- o Tracking Data: [Overall Tracking List Sheet and Detailing Visit Targets](#)
- o [Provider Evaluation of a Visit: Post-Detailing Session Evaluation Form](#)

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