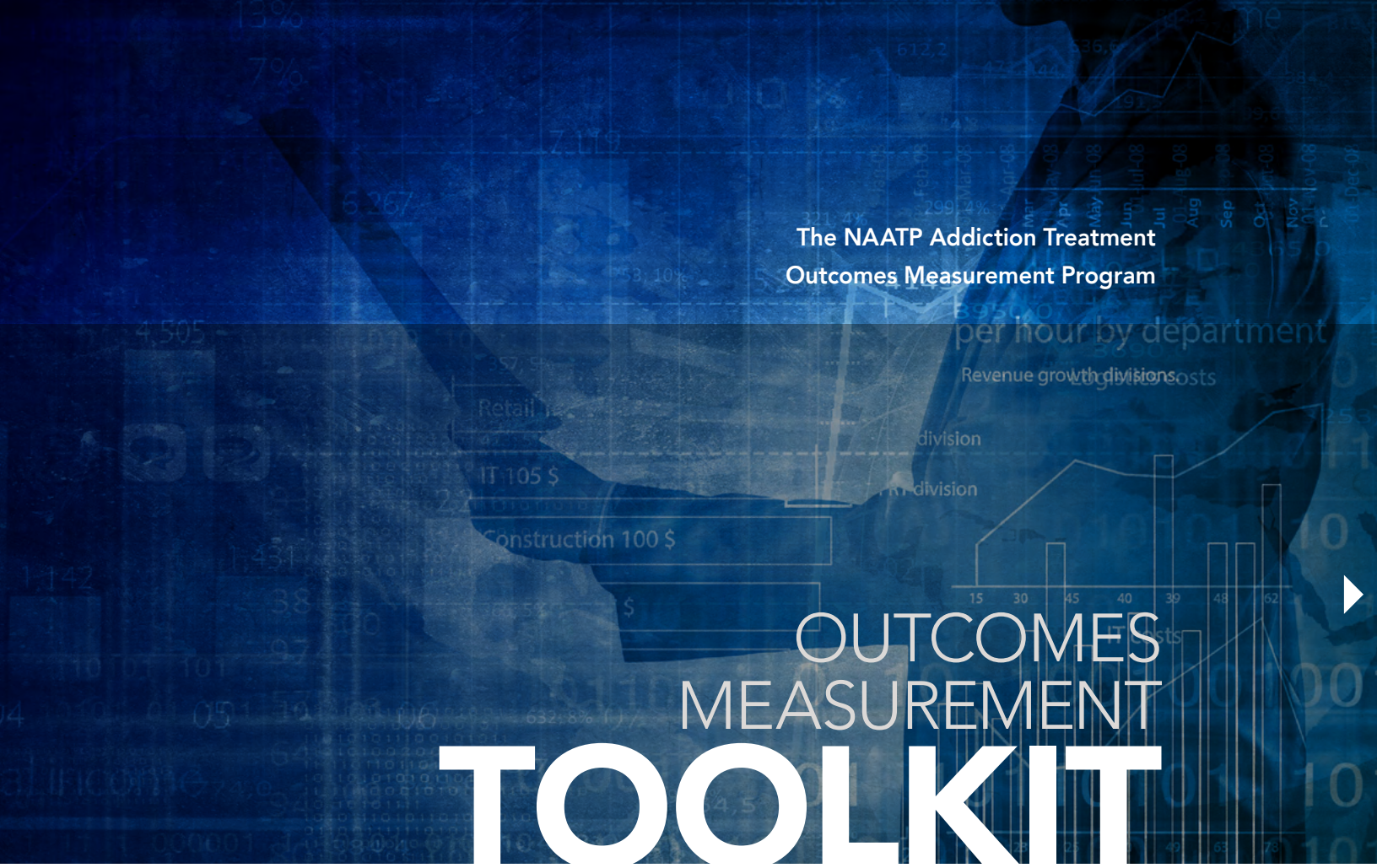

The NAATP Addiction Treatment Outcomes Measurement Program

OUTCOMES MEASUREMENT TOOLKIT AND PILOT PROGRAM FINAL REPORT

NATIONAL ASSOCIATION OF ADDICTION TREATMENT PROVIDERS

VOICE | VISION | LEADERSHIP

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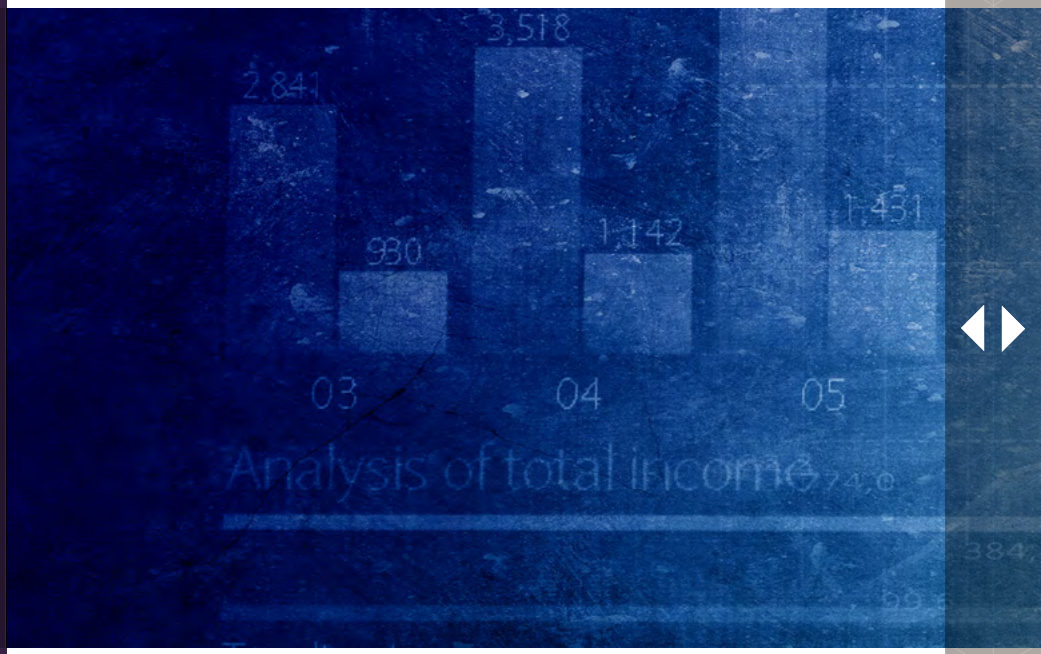
NAATP™

MISSION

To provide leadership, advocacy, training, and member support services to ensure the availability and highest quality of addiction treatment.



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THE NAATP ADDICTION TREATMENT OUTCOMES MEASUREMENT PROGRAM

BY MARVIN VENTRELL
NAATP Executive Director

NAATP is pleased to release this special issue of *addictionLEADER* containing the results of our three-year Outcomes Pilot Program (The OPP). The OPP was a major undertaking wherein eight NAATP addiction treatment provider pilot sites participated in a rigorous and uniform outcomes measurement process. The program was designed to test a method and produce a standardized, uniform, and replicable methodology for outcomes tracking that NAATP treatment providers could implement. The project was a success and produced the Outcomes Measurement Toolkit: The Addiction Treatment Provider Guide to Standardized Outcomes Measurement that we present to you here.

This was new work, in terms of comprehensive outcomes measures (ranging from abstinence to other indicators of wellness), strict social science protocols, and the multi-site nature of the study. The OPP was a historically unique program conducted by independent researchers under the scrutiny of an Institutional Review Board (IRB), adhering to the requirements of human subject research in addition to the confidentiality protections of the National Institute of Health (NIH). While some Substance Use Disorder outcomes research has been conducted over the years, it has not all been extensive, and it has not necessarily conformed to social science research protocols that ensure fidelity. The addiction treatment field, therefore, lacked the validated nationwide standard for treatment providers to collect data through common outcome measures that a healthcare system requires.

The purpose of the Outcomes Toolkit is to close the research gap with standardized data, tools, and processes, and to demonstrate the long-term impact of Substance Use Disorder services across providers. Through widespread use, we believe the Outcomes Toolkit will lead to common data collected across providers on participants, services, and outcomes that will support additional research, improved understanding of effective practices, and the ability to promote the value of treatment provider services.

The Outcomes Toolkit is grounded by the process and data from the pilot program. That information is contained in a second document, the Addiction Treatment Providers Outcomes Pilot Program Final Report which you will find in this issue following the Toolkit. The data analysis represented in the Final Report demonstrates the protocols of the study and informs the Toolkit best practices.

NAATP is grateful to our members who dedicated their time and resources to this project as pilot sites. Our thanks, therefore, go out to: Ashley Addiction Treatment, Avenues Recovery, Caron Treatment Centers, Hazelden Betty Ford Foundation, New Directions for Women, Seabrook, Sundown M Ranch, and Tully Hill Chemical Dependency Treatment Center.

We also thank our researchers at the OMNI Institute: Holen Hirsh, PhD, director of public and behavioral health; Natalie Wheeler, PhD, researcher; Katie Gelman, MPH, DrPH, vice president, public and behavioral health; and NAATP Outcomes Project Manager Jessica Swan. Finally, we are grateful for the foundational work on outcomes measures by Norman Hoffman, PhD, on which the study relied.

The objective, now, is implementation by our members, and that will take various forms depending on providers' goals and capacity. Our association Guideline is that all our provider members dedicate themselves to an outcomes tracking objective that conforms to the parameters of the Toolkit. Outcomes tracking is, in fact, one of the new core competencies of treatment provider operation that will be stated in the NAATP Addiction Treatment Provider Guidebook, due out later this spring.

NAATP treatment providers interested in more information and in implementing the Toolkit at their centers may contact NAATP at outcomes@naatp.org with the subject line "Outcomes Toolkit Implementation" or contact the OMNI Institute at omni@omni.org and refer to NAATP Outcomes Toolkit Implementation. ■

NAATP ADDICTION TREATMENT OUTCOMES MEASUREMENT TOOLKIT

The Addiction Treatment Provider Guide to Standardized Outcomes Measurement

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The NAATP Addiction Treatment Outcomes Measurement Toolkit was developed by The OMNI Institute (OMNI) on behalf of The National Association of Addiction Treatment Providers (NAATP). OMNI accelerates positive social change by supporting the public, nonprofit, and philanthropic sectors with integrated research and evaluation, capacity building, and data utilization services. For over 20 years, OMNI has partnered with stakeholders and providers across the spectrum of substance use prevention, treatment, and recovery to conduct research and support implementation of best practices. If you would like to learn more about this Toolkit and how you can use it at your facility, please contact NAATP at 888-574-1008 | outcomes@naatp.org or OMNI at 800-279-2070 | omni@omni.org.

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OUTCOMES MEASUREMENT TOOLKIT

INTRODUCTION AND PURPOSE OF THE TOOLKIT

The NAATP Addiction Treatment Outcomes Measurement Toolkit (the "Toolkit") is designed to assist NAATP members in tracking patient outcomes to measure the impact of treatment for patients with substance use disorders. The Toolkit contains a) information on how to effectively plan and prepare for outcomes research[1] and b) surveys and protocols that organizations can use or adapt to meet their organizational research goals. The information, surveys, and protocols contained in this Toolkit are meant to serve as a guide for organizations seeking to learn more about patients' experiences in treatment and ongoing recovery after treatment. Recovery outcomes are guided by the Substance Abuse and Mental Health Services Administration's (SAMHSA) definition of recovery — "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential."[2] This Toolkit can also help members assess their organizational capacity to collect data and make decisions about whether to engage an external research organization to assist with data collection and reporting.

OUTCOMES RESEARCH: WHAT AND WHY

Outcomes research focuses on assessing results for individuals who have received an intervention to determine the impact of the intervention. In substance use treatment outcomes research, programs define short and long-term goals, and systematically track progress towards those goals. For example, short-term outcomes include factors related to what happened in treatment such as length of stay, services utilized, and program completion rate. Long-term outcomes focus on changes in condition after treatment and may include, but are not limited to, substance use, mental health, aftercare engagement, life satisfaction, and other indicators of well-being.

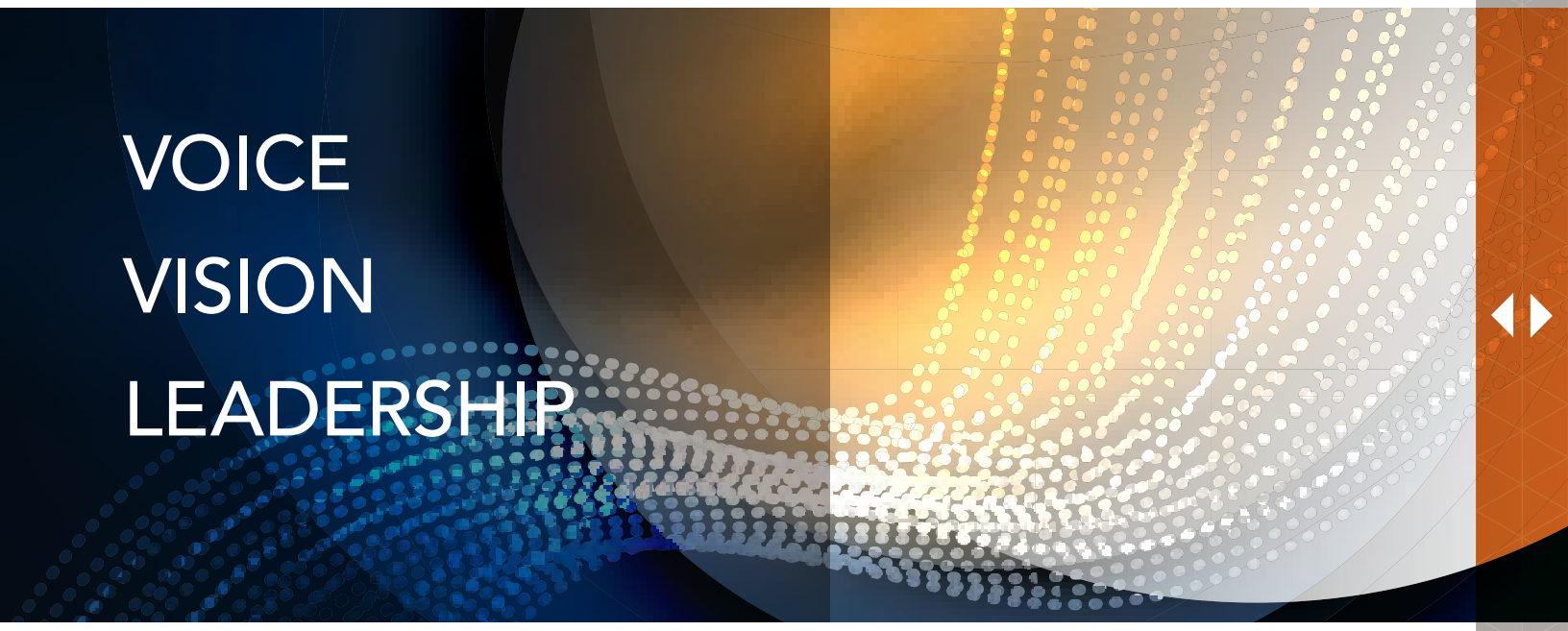
Example Short Term Outcomes

- Length of stay
- Services utilized
- Completion rate

Example Long Term Outcomes

- Substance use
- Mental health
- Aftercare engagement
- Life satisfaction

1. Throughout this Toolkit we use the term research broadly when we talk about research and evaluation activities designed to collect data from patients who have received substance use treatment services. Formal research activities require review from an Institutional Review Board, and the distinction between research and evaluation is discussed in the Ethics section of the Toolkit.
2. https://www.samhsa.gov/recovery



The primary function of outcomes data collection and analysis is organizational learning and improvement. For example, organizations can use outcomes data to:

- Set programmatic goals and monitor progress towards goals so that they can adjust programming if needed (e.g., monitoring completion rates, abstinence rates six months and one-year post treatment);
- Learn more about how services are related to recovery (e.g., identifying what aspects of treatment are most strongly related to positive outcomes for patients);
- Learn about what types of patients benefit most from treatment by examining outcomes for sub-groups of participants; and
- Inform efforts to market services to audiences for whom the program may be especially beneficial.

In the field of substance use treatment, although many substance use treatment providers conduct research on outcomes for participants served through their own programs, there is not currently a nationwide standard for treatment providers to collect common outcomes data. NAATP's goal in producing this Toolkit is to help close the gap in treatment outcomes research by offering standardized tools and processes. Through widespread use, the Toolkit can facilitate common data collection across providers on participants, services, and outcomes that will support additional research, improved understanding of effective practices in treatment, and the ability to promote the value of treatment provider services. ■

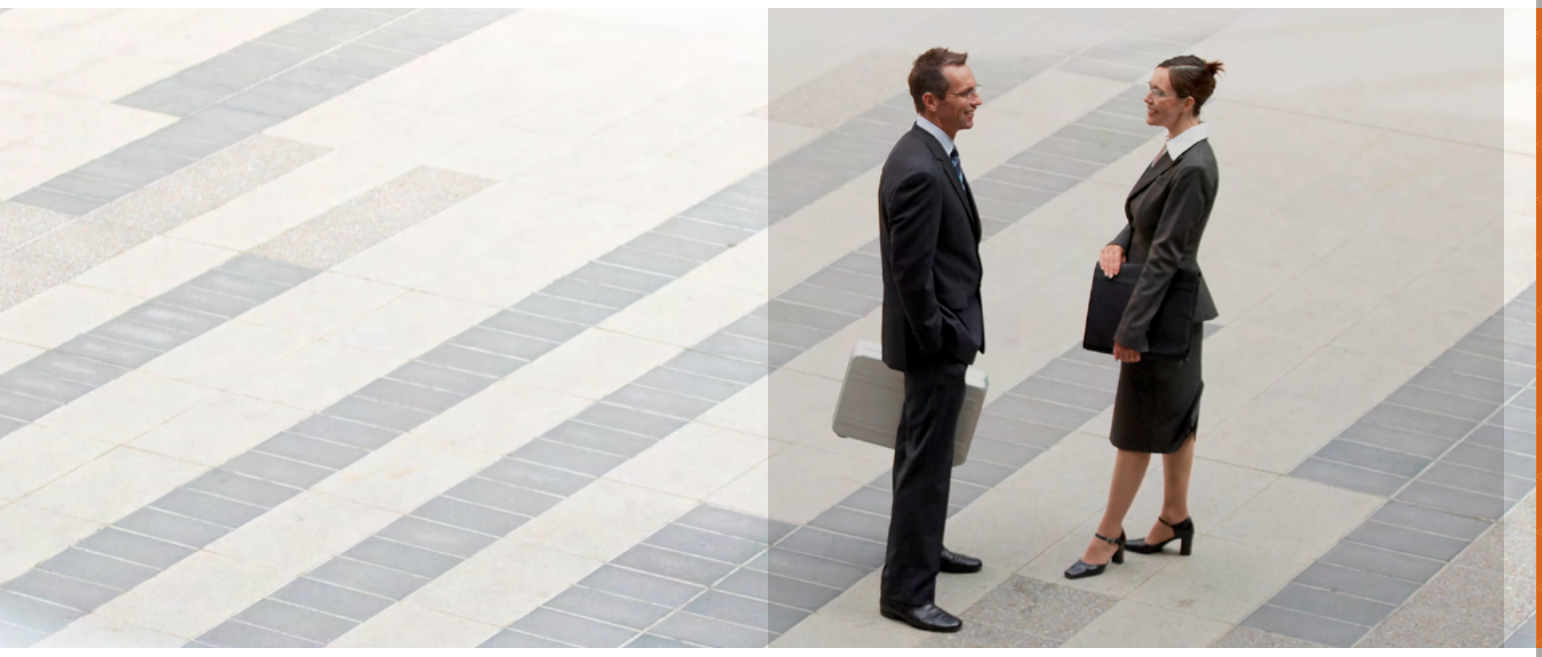
OVERVIEW OF NAATP'S OUTCOMES PILOT PROGRAM

The Toolkit development was guided by NAATP's Outcomes Pilot Program (OPP), a multisite study designed to develop and disseminate best practices for conducting outcomes research for substance use treatment. The OPP utilized a longitudinal, nonexperimental study design. Each site that participated in the study assessed participants[3] over the course of a year and collected survey data at intake and at five follow-up time points. Through the OPP, protocols and measurement tools (surveys) were developed and piloted. The learnings from the pilot process informed the protocols, surveys, and best practices contained in the Toolkit. NAATPs goal is for the treatment field to engage in uniform collection and analysis of outcomes data through the use of this Toolkit.

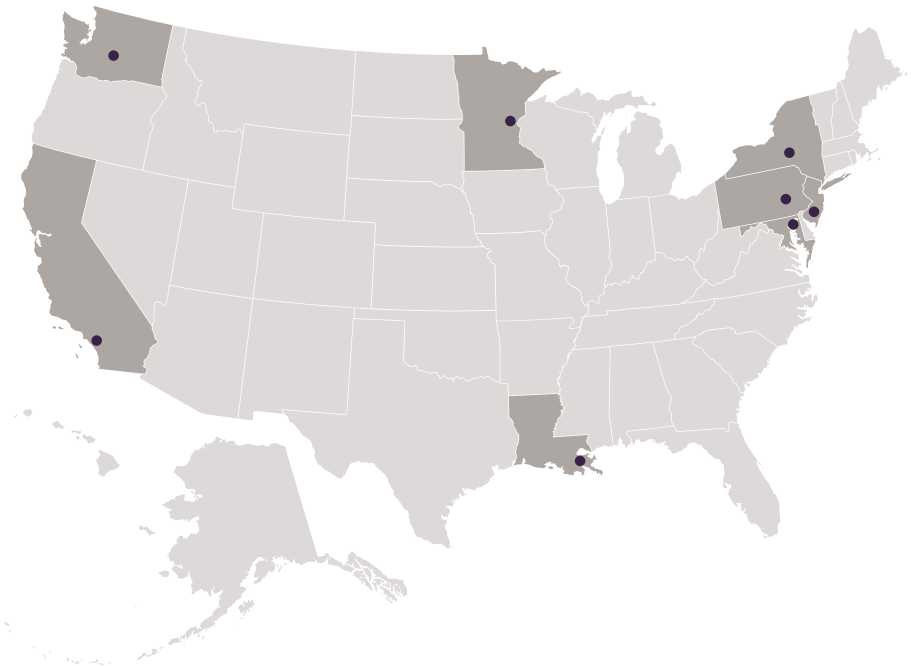
In addition to this Toolkit, final data reports were provided to NAATP and each participating pilot location. For more information about the data collected in the pilot, please contact NAATP.

The eight OPP sites enrolled 748 participants, with each site enrolling between 35 and 125 participants. Participants completed surveys about their substance use, mental health, and treatment services at intake and at five time-points in the year following intake to programs. The NAATP OPP followed all standard guidelines for ethical research including obtaining Institutional Review Board (IRB) approval and a Certificate of Confidentiality (CoC) from the National Institutes of Health. A CoC offers additional protection of privacy for research participants by protecting researchers against compulsory legal demands for identifying information. ■

3. Clients or patients enrolled in the OPP are referred to as participants throughout the Toolkit.



EIGHT OF NAATP'S MEMBER ORGANIZATIONS PARTICIPATED IN THE OPP



Outcomes Pilot Program Sites

Ashley Addiction Treatment
Havre De Grace, MD

Avenues Recovery
Metairie, LA

Caron Treatment Centers
Wernersville, PA

Hazelden Betty Ford Foundation
Center City, MN

New Directions for Women
Costa Mesa, CA

Seabrook
Bridgeton, NJ

Sundown M Ranch
Yakima, WA

Tully Hill Chemical Dependency Treatment Center
Tully, NY

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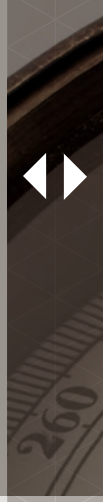
PLANNING FOR OUTCOMES RESEARCH

Prior to implementing an outcomes research program, organizations should give careful consideration to a) the ethics involved in conducting research and evaluation with individuals receiving substance use treatment services and b) the organizational capacity and infrastructure required to successfully implement an outcomes research program. In this section, we provide information on each of these topics.



ETHICS

Any organization embarking on an outcomes research program is required to conduct the research in a manner that protects the rights of human participants. Ethical research establishes boundaries between practice and research so that research activities do not impinge on the primary work of providing services to patients. In this section, we summarize three main principles that guide ethical research practices; provide information on when and how to engage an Institutional Review Board (IRB); share best practices in obtaining informed consent; convey considerations on the provision of participant compensation or incentives; and provide guidance on how to keep participant information confidential.

PRINCIPLES OF ETHICAL RESEARCH

All research should follow the ethical considerations outlined in the Belmont Report[4], as follows:

Respect for Persons

Respect for Persons seeks to 1) ensure that, as independent beings, individuals can make their own, informed decisions on whether or not to participate in research and 2) protect individuals who may have limited capacity to make informed decisions. In social science research, this principle is typically addressed through voluntary participation and informed consent protocols. Specifically, individuals should be given a choice to participate, and it should be clear that they will not be denied services or experience any harms from choosing not to participate. They should be given the option to withdraw from the research at any time, for any reason, without penalty. Individuals should not be coerced or pressured into participating in research. The research team should provide potential participants with enough information so they understand the purpose of the research, what their involvement will entail, and the risks and benefits of participation, including how their information will be protected. In substance use treatment research, special considerations are needed when designing studies involving youth and when studies include individuals mandated to treatment.

Beneficence

Beneficence simply means do no harm. In social science research, this principle is typically addressed by ensuring that risks are minimized, any risks are justified by the benefits of the research, and conflicts of interests are managed to avoid bias. A good, carefully thought-through research design and well-trained research staff minimize the likelihood of harm from the research.

4. https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html

Justice

Justice ensures that researchers treat people fairly and equally distribute burdens and benefits of research across all groups of people. In practice, this means that research studies should not target vulnerable people (for example, individuals who are incarcerated or court-mandated for treatment) for convenience, do not select participants because of their ease of availability or compromised position, and finally do not exclude people who are likely to benefit from the research.

The "Common Rule" is the set of regulations that were developed to ensure compliance with the above principles and falls under the Department of Health and Human Services' Office of Human Research Protections (OHRP). The regulations have been adopted by many other federal departments that regulate research that involves human participants. The three major requirements of the Common Rule include:

- Institutional assurances of compliance in the form of a Federal Wide Assurance (FWA)
- Review of research by an Institutional Review Board (IRB)
- Informed consent of participants

IRB CONSIDERATIONS

Prior to implementing a substance use treatment outcomes program, organizations need to determine whether IRB approval is required. Ultimately, the decision on whether to engage an IRB will depend upon the purpose of the project, how information will be used, and potentially the project funder. The following guidelines outline considerations for circumstances under which an IRB approval should be pursued:

- If the project is research, IRB approval is necessary. Research projects are conducted with the purpose of generalizing the findings or the intent to publish the findings.
- If the project is an evaluation to be used solely for internal learning purposes within an organization, and will not be used for generalizing findings across other treatment providers, IRB approval typically is not necessary.
- If the project collects data from vulnerable populations (for example, minors, pregnant women, or incarcerated individuals) it may require IRB approval.
- When in doubt about whether a project constitutes research, consult with an IRB.
  - The IRB will determine which category the project falls into.
  - The IRB can determine if the project meets federal regulations or is exempt.
- There are public and private IRBs and almost all have a fee that needs to be considered in project budgets.

INFORMED CONSENT

Critical to the ethical process is developing a protocol through which individuals can assess the risks and benefits of participation and provide informed consent should they wish to participate. Obtaining informed consent involves:

- Giving participants adequate information about the study
- Ensuring participants understand the purpose of the study and what participation entails
- Providing participants an opportunity to consider all options, including not participating
- Responding to questions
- Confirming voluntary participation

A written consent form should be used to direct an informed-consent conversation between research staff and potential participants. The written form serves as a guide for a verbal explanation of the study and allows participants to ask questions about each aspect of consent. The language in the form should be simple, understandable, and appropriate for the target population. If the study population speaks multiple languages, consent should be provided in a language that participants speak. Participants should always be given a copy of the consent form so that they can contact someone with questions that may arise after the conversation.

An IRB may have specific requirements in a consent form. Nonetheless, there are several elements that should be included per federal regulations (outlined following).

Basic Components of a Consent Form

- A description of the purpose and goals of the research
- A description of how long the research will last and how many people will be studied
- A statement indicating that participation is voluntary
- A description of what happens if a participant decides to be in the research
- A description of what happens if a participant decides not to be in the research
- A description of what happens if a participant agrees to be in the research, but later decides to no longer participate in the research
- A description of any anticipated risks, harms, discomforts, or inconveniences for participants
- A description of compensation or incentives, if provided
- A description of any benefits for participation and/or any anticipated costs
- A description of what happens to the information collected and how it will be protected
- A description of how the findings will be shared
- Contact information of the researchers who can answer questions about the study and contact information for the IRB that has approved the study (if applicable)
- A signature line for participants to sign and date the form

COMPENSATION OR INCENTIVES

Compensation or incentives include anything offered to participants as a reward or a tangible 'thank you' for their participation in the research. Incentives can be monetary (cash, gift cards, vouchers, etc.) or non-monetary (gift items, course credit, etc.). Offering compensation or incentives in research studies may increase response rates and participants' willingness to participate in research activities over an extended period. Participant compensation should be fair, and the confidentiality of information related to incentive payments should be protected. When considering utilizing incentives in research, it is important to select a compensation amount that is enough to encourage participation but is not so much as to coerce participation. Furthermore, when selecting incentives, the desirability of the incentive to participants should be considered (for example, retail location of a gift card).

OPP sites that elected to offer compensation provided $10 Target gift cards for completion of one-month and three-month follow-up surveys and $20 Target gift cards for completion of six-month, nine-month, and twelve-month follow-up surveys.

CONFIDENTIALITY

The following guidelines will help your organization ensure that patient confidentiality is maintained throughout the research process. Please note that the guidelines below are for confidentiality as it pertains to research and evaluation. Additional practices may need to be implemented to comply with other applicable laws and regulations (e.g., HIPAA and 42 CFR Part 2).

How to Protect Participant Privacy and Confidentiality

- Explain the study and obtain informed consent in a private space.
- Provide a private space for participants to complete the study forms.
- Keep any paper forms related to the study in a locked drawer or cabinet.
- Do not leave any study forms in unsecure locations.
- Store electronic files on secure servers with restricted access to necessary research staff.
- Do not share information about study participants with other staff or participants.
- Use a code name instead of the treatment site name when conducting follow-up surveys (for example, The Health Survey).
- When conducting follow-up surveys, review the participant's consent beforehand.
  - Do not mention the name of your organization if the participant did not give consent for you to mention the name.
  - If anyone other than the participant answers the phone, or if you are calling a participant's contact, do not disclose that the participant is in a research study or that the person has received treatment services. Develop and utilize scripts when speaking with individuals other than the participants.

How to Identify and Report a Breach of Confidentiality

- A breach of confidentiality is when data provided by a study participant are disclosed to anyone who is not study staff, without the participant's consent.
- Examples of a breach of confidentiality:
  - Accidentally leaving a paper study form on a desktop, that is picked up by someone who should not have access to the data
  - Leaving the study survey open on a computer before data are submitted, and allowing another person to access the computer
- If you suspect a breach of confidentiality, you must report it to your study coordinator, and/or IRB within 24 hours. Immediate steps should be taken to mitigate harm to participants as a result of the breach of confidentiality. Any policies and procedures as they relate to HIPAA or other organizational policies related to patient confidentiality should also be followed.

Addressing Participants' Questions and Concerns

- Before any participant interaction, be sure you are familiar with all study forms and you have had all your questions addressed.
  - Remember that participation in research is voluntary. Anyone can choose to not participate. Non-participants should still receive the same treatment from your organization without any consequences.
  - Anyone can stop participating at any time without any consequences.
  - Participants can skip any questions they do not want to answer.
- Develop protocols for addressing difficult situations, such as a participant being concerned about their ability to receive fair treatment if they do not participate in the study or a participant becoming upset during a research-related activity. Be sure there is a chain of command and protocol, so staff know how to respond to difficult situations.

ORGANIZATIONAL CAPACITY AND INFRASTRUCTURE

Careful planning and dedicated resources to outcomes research are critical for success. Prior to implementing outcomes research, organizations should have a clearly articulated research plan and a documented implementation protocol, dedicated staff time to support research activities, data management systems to house study data, and systems for maintaining organizational knowledge to sustain long-term, consistent data collection. In this section, we outline key considerations for determining your research plan, infrastructure necessary for successful data collection and reporting, staffing and primary roles, and organizational partners that may assist you in conducting outcomes research.

Outcomes Research Plan Checklist

The first step in the research/evaluation process is to define your goals and determine your study design. Having clearly defined goals will help you to determine what data need to be collected, how they need to be collected, and when they will be collected. Develop a plan that articulates answers to the following questions:

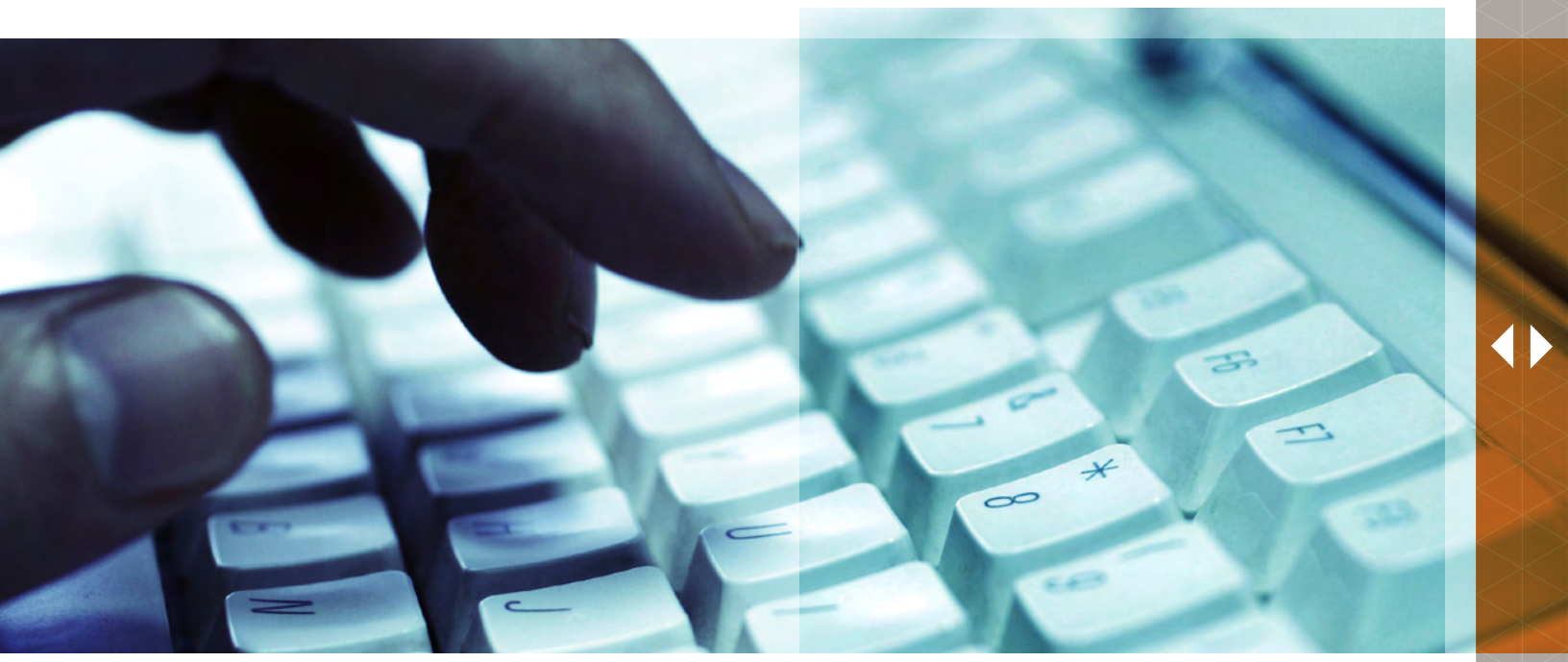
- ☐ What are your research goals?
- ☐ What research questions do you hope to address for your organization?
- ☐ What data need to be collected to answer your research questions?
- ☐ Who will you enroll in the study?
- ☐ How and when will you collect data?
- ☐ How will you report data and who are your stakeholders?

Infrastructure Checklist

Developing and implementing an outcomes research program requires leadership commitment, dedicated staff time, documented protocols and processes, and appropriate tools for data collection and reporting. Ensure that the following are in place:

- ☐ Training (and refresher training) for all staff involved in outcomes research[5]
- ☐ Plans for managing staff turnover, including how new staff will be trained on research protocols
- ☐ Systems for managing data (see data management checklist next)
- ☐ Plans for reporting data to internal and external stakeholders

5. IRBs will often require additional training in research with human participants.



Data Management Checklist

A clear data management plan will help ensure that your data are reliable, complete, protected, and available to the research team. When setting up your data management system, check that it includes systems for tracking the following:

- ☐ Patients enrolled in the study, including when they enroll, when they are discharged from treatment, and when they are eligible to participate in follow-up surveys
- ☐ Contact information for reaching patients after they leave treatment
- ☐ Patients who are no longer participating in the study due to: declining to participate, re-enrollment in treatment, incarceration, death, etc.
- ☐ Survey data collected at each data collection time point
- ☐ Participant incentive distribution

Your data management plan should include the following:

- ☐ A patient ID system that links data (for example between intake, discharge, and follow-up) confidentially and uniformly without using individuals' names
- ☐ Methods to protect and secure data through encrypted and/or password protected files, and frequent backups of all data files. Any repository service that holds the data should be updated/maintained.
- ☐ Documentation of how data are collected so that the data can be used and understood by multiple users and can be managed in the event of staff turnover
- ☐ Data auditing procedures for:
  - Identifying and correcting duplicate IDs and other duplicate data
  - Identifying and updating missing consent information, intake/discharge dates or participant contact information
  - Monitoring how many participants have elected to be excluded from the study after intake
  - Monitoring follow-up rates at each follow-up time period, including reasons for non-responses (e.g., refusals; unable to locate)

Questions to ask when formulating a data management plan:

- ☐ Who is responsible for managing the data, and/or monitoring the management of the data?
- ☐ Where are the data going to be stored and how will data be secured? How long will data be stored?
- ☐ What file formats will be used for the data? What filing system will be used?
- ☐ What is the backup process for the data and how often will it occur?

Data Collection Checklist

One of the most important, yet challenging, components of longitudinal data collection is enrolling an appropriate number of participants into the study and keeping them engaged in the study long after treatment has ended. The following checklist can help increase the likelihood of meeting enrollment and follow-up targets.

Target Sample:

- ☐ Determine and set target enrollment numbers prior to the start of the study. Your sample size should be determined based on the types of analyses you will want to conduct with your data. A power analysis may be conducted in advance to determine adequate sample size.
- ☐ Designate one person or a specific "team" responsible for enrolling participants in the study. Ensure they are all trained on the consent language, tools, and timelines, and that they are prepared to answer questions with consistency. The more consistent and transparent the enrollment process is, the more likely participants will have confidence and interest in the study.
- ☐ Monitor and report on enrollment rates often.

Follow-up Data Rates:

Achieving adequate follow-up rates in longitudinal studies presents unique challenges. Time, expense, and participant engagement all impact response rates, and follow-up can be particularly challenging with high-risk populations. Nonetheless, follow-up rates will ultimately impact the validity and generalizability of the findings, so it is important to achieve the maximum follow-up rate possible. SAMHSA sets target follow-up rates at 80%.

The following recommendations may help increase response rates:

- Staff should anticipate that it may require at least 10 contacts during each follow-up window to adequately track difficult-to-follow substance-using populations and know that there will likely be a subsample of participants who require even more than 10 contacts.
- Staff should utilize a trauma-informed approach to data collection, if appropriate.[6]
- Monitor and report on follow-up rates often.

6. https://www.integration.samhsa.gov/about-us/Trauma-InformedInterviewing Manual-508.pdf; Scott CK, Sonis J, Creamer M, Dennis ML. Maximizing follow-up in longitudinal studies of traumatized populations. J Trauma Stress. 2006;19(6):757-69.

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Staffing Checklist

Determining appropriate staffing is a critical step in the outcomes research process. Staff should be designated to coordinate research activities and to collect intake, discharge, and follow-up data. Processes should be documented and plans should be designated in the event of staff turnover.

Organizations engaged in outcomes research should appoint the following roles:

☐ Site Champion:
typically someone in a leadership role, the site champion is the individual within the organization responsible for gaining staff buy-in and maintaining organizational commitment to the outcomes research process.

☐ Research Coordinators:
research coordinators are the staff assigned to addressing patients' questions and concerns and overseeing data collection. Research coordinators should be well trained in research ethics, protocols, and survey administration. Research coordinators should be responsible for training replacement staff if there is staff turnover during the study.

☐ Research Team Members:
research team members are the staff assigned to enrolling patients in the evaluation and collecting patient data. Research team members should be well trained in research ethics, protocols, and survey administration.

Research Partners

Partners may be considered for implementation of an outcomes research program if there is not sufficient internal capacity and infrastructure within your organization. The following research partners may be considered:

- Institutional Review Board (IRB):
  If you determine that IRB approval is necessary for your study, you may submit your research protocol to an external IRB. Commercial and academic IRBs are available.
- Evaluators/Researchers:
  Depending on staffing within your organization, you may determine that an external evaluation or research firm would be useful to help determine research questions, develop a study design, create data collection protocols, support post-discharge data collection, and/or report on outcomes data.
- Software/Data Management Firms:
  Tracking data at multiple timepoints throughout the course of a year, particularly once patients have left treatment, requires careful data management. Data management needs should be assessed to make decisions about whether to engage a data management partner. ■

CONDUCTING OUTCOMES RESEARCH

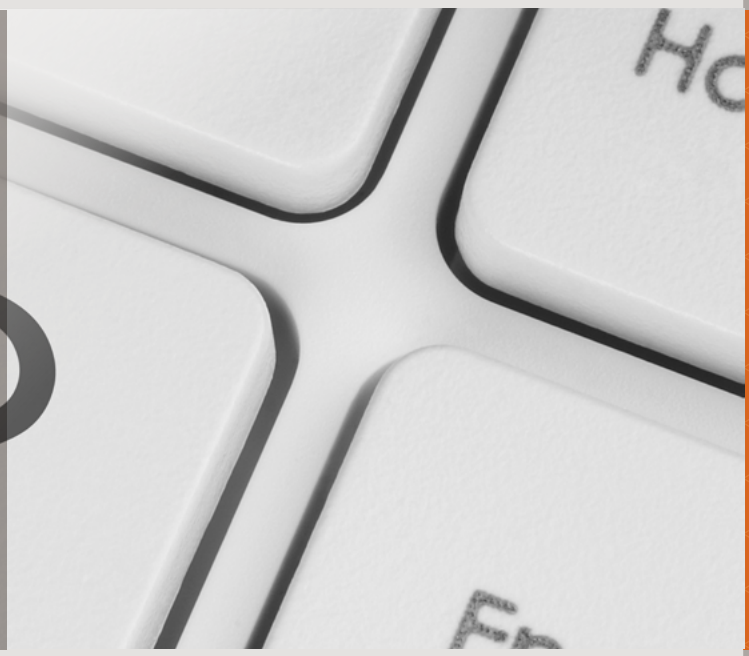
Once the planning stages are completed, organizations are ready to implement data collection protocols, administer surveys, analyze data and report on outcomes. This section provides information on each of these components of the research process, followed by a Best Practices Checklist for conducting outcomes research.

DATA COLLECTION PROTOCOLS

Clear research protocols ensure that all staff understand the processes for conducting outcomes research, are prepared to work with participants effectively, and ensure uniformity in the way that data are collected. This section outlines recommended data collection protocols based on lessons learned from the OPP and is based on administration of the following forms/surveys (the surveys themselves are provided in the next section):

1. Consent form: to be developed by your organization based on your study requirements
2. Intake form: collects baseline data, including substance use and mental health history
3. Locator form: includes participant contact details for follow-up survey completion
4. Discharge reminder form: includes date of discharge (allowing for a calculation of participants' length of stay) and, where applicable, reason for incomplete program completion
5. Follow-up form: collects follow-up outcomes data
6. Service Summary: designed to be administered at 3 months from the date of intake and collects information related to treatment services

Data collection protocols can be modified to meet program needs. The following figure provides an overview of each data collection period (intake, discharge, and follow-up); the figure is followed by a protocol for each type of data collection.



INTAKE	DISCHARGE	FOLLOW-UP
Within three days of intake	Within three days prior to or on day of discharge	Contacted via phone at 1, 3, 6, 9, and 12 months from intake
Clients complete: Consent Form Intake Form Locator Form	**Clients complete:** Study Reminder Form Update Listing Forms	**Clients complete:** Follow Up Form
		Clients complete: Service Summary (3 months from intake)
		Follow up windows open for 6 weeks after follow-up date

Protocol for Intake

The intake process outlined below will take approximately 30 minutes to complete. Staff should be available during the intake process to answer questions and address concerns. It is recommended that this process take place within three days of participant intake to residential treatment (after detox).

Please note:

- If a participant is in detox during the first three days of intake, they may complete the intake forms after completing detox.
- If a participant is not in adequate psychological or physiological condition during the first three days of intake, they may complete the forms once their condition is improved.

Intake Checklist:

☐ Explain the research to the participant and ask if they would like to participate (it is recommended that you create a script based on the information that is in your consent form).
- If the participant agrees to be in the study, have the participant read and sign the consent form and an Authorization to Use and Disclose Protected Health Information form (if applicable).[7]
- Offer to read the forms to the participant and be available to answer questions and address concerns.

☐ After the participant has signed the consent form, retain the signed form for your records and provide the participant with a copy of the consent form.

☐ Ask the participant to complete the Intake Survey.
- A staff member can facilitate completion of the survey (read the items and enter in the responses) or the participant can do this without assistance.

☐ Ask the participant to complete the Locator Form.
- A staff member can facilitate completion of the locator form (read the items and enter in the responses) or the participant can do this without assistance.

7. https://privacyruleandresearch.nih.gov

Intake Tips:

Explain to participants at intake how the research benefits program services and the community.

Ensure staff are available who can answer questions in the language used by participants.

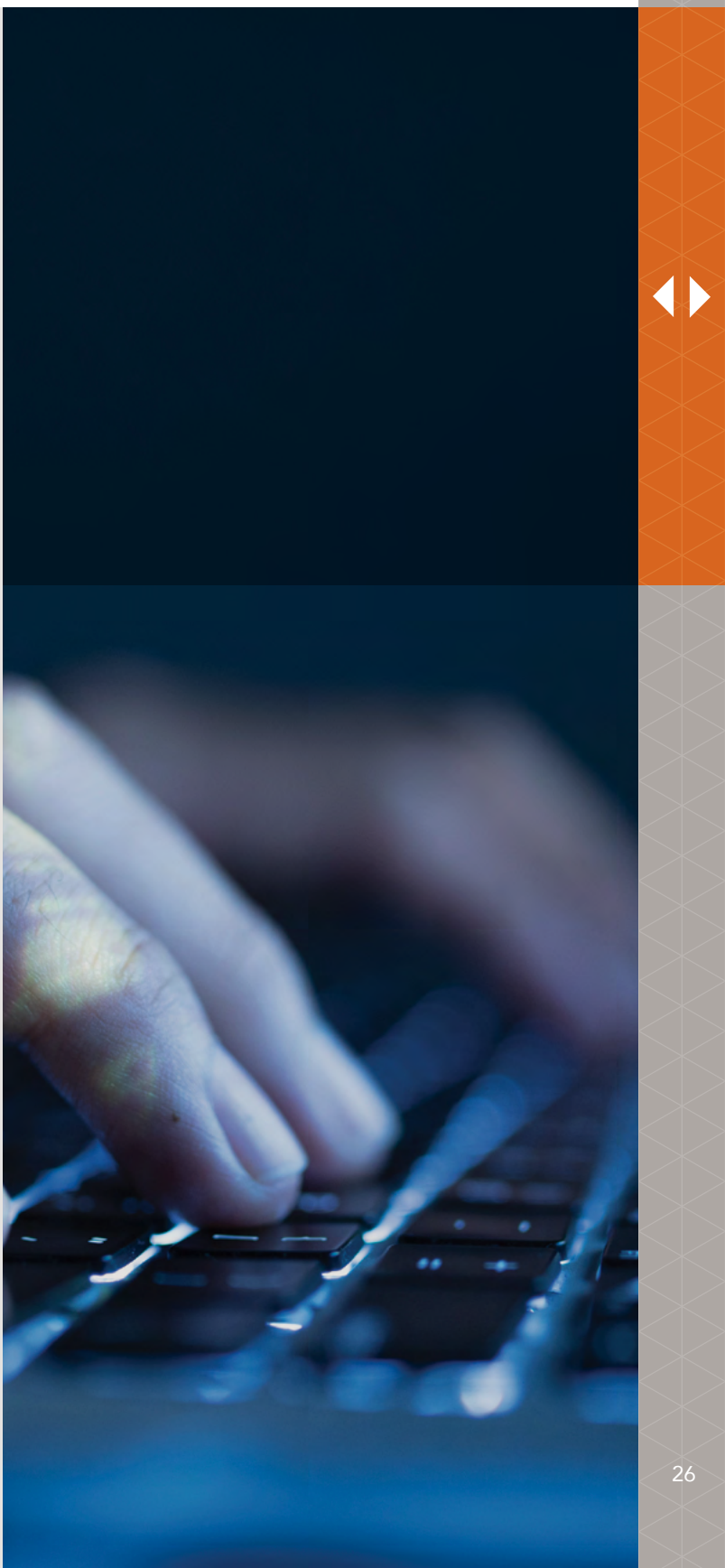
Obtain as much contact information as possible; this will make it easier to locate participants to complete follow-up surveys.

Reassure participants that they will be contacted only for follow-up data collection.

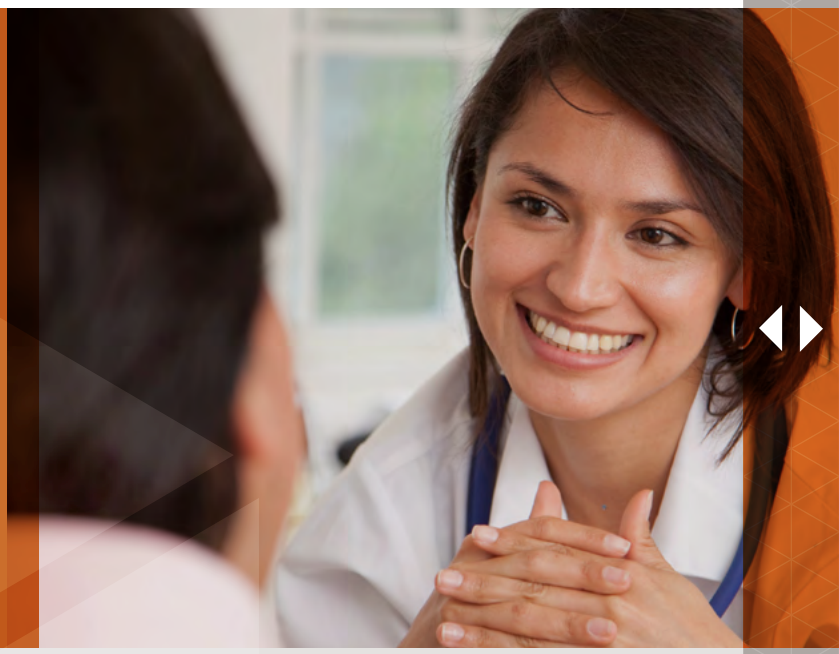
Reassure participants that their information is confidential and will not be shared with others and provide information on how this is accomplished (e.g., using participant identifiers rather than names; encrypting data files).

Ensure that staff apply a trauma-informed approach, as appropriate.[8]

Double-check that the patient ID is written down and entered correctly on all forms and in database systems. This will reduce the risk of duplicating IDs and increase data quality.



8.https://www.integration.samhsa.gov/about-us/Trauma-InformedInterviewingManual-508.pdf



Protocol for Discharge

At discharge, staff should remind participants that they have enrolled into a research study and that they will be contacted at the intervals designated for follow-up surveys. Staff should also ask participants to update any contact information that may have changed since intake. The discharge process will take approximately five minutes to complete. It is recommended that this process take place in the three days prior to discharge or on day of discharge.

Discharge Checklist:

- ☐ Remind the participant they have consented to be in the research study and review its purpose. Emphasize how the participant is helping to improve services and their community by participating. This helps to promote their buy-in and increase likelihood of participation in follow-up surveys.
- ☐ Review information on the locator form with the participant and update it with any new contact information.
- ☐ Document date of discharge on the Discharge Reminder Form.
  - If a participant does not finish treatment, they are still allowed to participate in the follow-up surveys.
- ☐ If a participant leaves treatment without being formally discharged, staff should still document their discharge date (date they left treatment) to calculate the participant's length of stay. Staff also need to document the reason why the participant was not discharged (see Discharge Reminder Form).

Discharge Tips:

Consider offering participants a "business card" with information about the study, including the phone number they will be getting calls from and when they can expect those calls.

Suggest that the participant add the facility number to their contact list under a familiar name.

Ask participants how long they have had their phone number and if they anticipate changing it any time soon. If so, gather additional phone numbers. Ask participants to keep you informed of any phone, address, or email changes.

Protocol for Follow-up

Your organization can determine when follow-up surveys should be administered so that the timing aligns with your research goals. For a one-year follow-up study, the following intervals are recommended: 1, 3, 6, 9 and 12 months from the date of intake-to-treatment. Frequent intervals of contact ensure that participants remain engaged in ongoing data collection and allow for consistent monitoring of change in outcomes over time. Participants will be asked to complete the follow-up survey at each timepoint. The additional Service Summary form should be completed together with the 3-month follow-up survey. The follow-up process will take approximately 15 minutes to complete (note: the process will take approximately 30 minutes in total when the Service Summary form is also administered).

- The recommended follow-up window, or period during which participants are eligible for each follow-up survey, is a 6-week timeframe that starts from the date that participants first become eligible for each follow-up. Participants should be contacted at least twice per week during this period to increase the likelihood of completed surveys.
- A data management system should be used to track participant information including IDs, intake/discharge dates, locator information, follow-up windows by timepoint, and a place for notes. These data should be used to create a list of participants who are currently eligible to complete a follow-up survey.

Intake:
January 1, 2019

1-month follow-up window opens:
February 1, 2019

2 or more contact attempts each week
for 6 weeks

1-month follow-up window closes:
March 15, 2019

3-month follow-up window opens:
April 1, 2019

2 or more contact attempts each week
for 6 weeks

3-month follow-up window closes:
May 13, 2019

Repeat
for each follow-up window

Note: *Once a participant has been reached and successfully completes the survey, or declines to participate, stop contact attempts. If 6 weeks pass and the participant cannot be reached, stop contact attempts until the next follow-up window opens.*

Follow-up Checklist:

☐ Review participant's consent information to ensure that the participant has consented to participate in follow-up data collection.

☐ Review participant's locator information to ensure that outreach efforts follow the participant's wishes, including whether it is allowable to review their medical records for additional contact information or to mention your organization's name when calling.

☐ Call the participant and verify identity by asking for the birthday.

- If the participant is available and the time is convenient, administer the survey.
- If the participant answers but indicates it is not a good time, determine a time to call back and document this in notes.
- If the participant cannot be reached, indicate the reason on the follow-up form.

☐ If gift cards or other incentives are provided for participation, after the participant has completed the survey, ask them where they would like their incentive sent.

☐ If a participant is unable to complete the survey or cannot be reached, indicate the reason on the follow-up form.

☐ Include any notes to document all attempted contacts, completed surveys, addresses where incentives are sent and any other relevant information in the participant's record.

Follow-up Tips:

Create scripts for different follow-up scenarios including when talking to participants or one of their contacts, or when leaving a voicemail for participants or their contacts.

Follow-up scripts should include the caller's name, why the person is calling, the type of incentive participants will receive by completing the survey (if applicable), and the caller's contact information.

Remind participants when they will be contacted to complete their next survey (for example, "I will call you again in December to complete your 3-month follow-up survey").

Ask participants the best time of the day/week to call and if they have updated contact information. This will make future follow-ups easier to complete.

Suggest that participants add the facility number to their contacts list under a familiar name.

Consider time zones when calling people who are located in other parts of the country.

Consider mailing letters to participants who are hard to reach and providing a number they can call to complete the surveys as another follow-up approach. ■

SURVEYS

Standardized surveys ensure that data are tracked consistently over the course of a longitudinal research program and that data are collected in a way that aligns with an organization's research goals. Asking questions in a way that promotes the collection of accurate and reliable information is critical to a successful outcomes research program. Furthermore, the use of common survey items across programs allows for cross-site and national comparisons that can help further research for the addiction treatment field. This section contains information on the surveys that were piloted in the OPP, as well as copies of the actual surveys for programs to use or adapt for their own outcomes research.

The surveys piloted in the OPP were adapted from the National Outcomes Recording and Monitoring System (NORMS)[1] surveys developed by Norman G. Hoffman, Ph.D., an expert in assessment development and evaluation in the behavioral health treatment field. The NORMS surveys were designed to serve as a foundational system to monitor substance use treatment outcomes and to contribute to quality improvement and an understanding of the benefits of treatment. The surveys use general language and do not contain references to specific programs or activities at any location, so that they may be used broadly. The surveys are also brief, generally taking less than 15 minutes to complete. It is important to note that the NORMS surveys are not intended to encompass all outcomes of potential interest. To meet specific study goals, such as broadening understanding of recovery, you may consider including additional whole health outcome measures such as life satisfaction, recovery capital, or other health measures.

The NAATP OPP explored the validity of the surveys by testing survey usability and protocols for survey administration. The tools performed well in the pilot. In some instances, survey items were used to create scales that reflect larger constructs; information on the reliability and distribution of these scales is included in Appendix B.

To the right, we provide an overview of the question areas of each recommended data collection survey, followed by a full copy of each survey. The surveys incorporate learnings from the OPP.[2]

Below are the question areas in each form:

Intake Form:
- Demographics and employment status
- Substance use history
- Social support
- Mental health
- Pain
- Legal issues

Locator Form:
- Contact information for participant
- Alternate contact information
- Probation/parole status
- Contact permissions

Discharge Reminder Form:
- Date of discharge
- Reason participant was not discharged (if applicable)

Follow-up Form:
- Continued care
- Substance use
- Medication
- Ratings of treatment (i.e. how helpful was group therapy)

Service Summary Form:
- Treatment utilized
- Post-treatment recommendations
- Treatment funding
- Program components
- Detox and maintenance medications
- Mental health
- Plans for continued care
- Social support

1. http://www.evinceassessment.com/research.html

2. Adaptations to the original NORMS instruments include language changes so that survey items could be administered by treatment staff or completed by participants, reorganization of survey items based on pilot site feedback, and minor revisions such as expanding the choice options for participant gender and adding a question about funding for treatment.

INTAKE FORM

Facility Name[1]

Patient ID[2]

Full Name

Maiden Name (if applicable)

Other married names (if applicable)

Nicknames or aliases

Date of Birth

Email address

Confirm Email address

Thank you for participating in this research study! The survey should take less than 30 minutes to complete. As a reminder, the information you submit is confidential and all contact information is used for the sole purpose of locating you for the follow-up interviews, and it will not be released except as required by law. Upon discharge, you will be asked to update any contact information. If you have any questions about the study, please ask the research coordinator.

1.Gender

- ☐ Male
- ☐ Female
- ☐ Non-binary/third gender
- ☐ Prefer to self-describe:
- ☐ Prefer not to say

2. How old are you?

Age in years:

3. What is your ethnicity?

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino

4. What is your race? (Check all that apply.)

- ☐ Black or African-American
- ☐ American Indian or Alaskan Native
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ Asian
- ☐ White
- ☐ Other

1. Field to be completed by research coordinator.
2. Field to be completed by research coordinator.

5.What is your current marital status?

- ☐ Never married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed
- ☐ Married or living as married

5b. If ever married:

How many times have you been married?

6. What Is the highest degree you have earned?

- ☐ No high school diploma or GED
- ☐ High school diploma or GED
- ☐ Vocational/technical school/business school
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctoral-level degree

7. What is your current employment status?

- ☐ Working full time for pay (35 hr./wk. or more)
- ☐ Working part time for pay (< 35 hr./wk.)
- ☐ Unemployed
- ☐ Not for pay by choice
- ☐ Disabled
- ☐ Retired

8. What is your primary job type when working for pay?

- ☐ Professional
- ☐ Upper-level management / business owner
- ☐ Mid-level management
- ☐ Sales / marketing
- ☐ Supervisory
- ☐ Craft / skilled trades / technical
- ☐ Office / white collar / clerical
- ☐ Transportation / equipment operator
- ☐ Laborer / unskilled worker
- ☐ Service worker (waiter / waitress)
- ☐ Domestic worker (housekeeper, etc.)
- ☐ Military service

9. In what range was your personal income in the past year?

- ☐ 10,000 or less
- ☐ $10,001 to $20,000
- ☐ $20,001 to $35,000
- ☐ $35,001 to $60,000
- ☐ $60,001 to $90,000
- ☐ Over $90,000

10. What Is the longest period of time (in months) that you were employed in your lifetime?

In months:

SUBSTANCE USE HISTORY[1]

If used in the past 12 months, ask follow-up questions (a-l) below:	11. Alcohol	12. Marijuana	13. Cocaine	14. Heroin	15. Prescription Opioids	16. Other Opioids	17. Methamphetamine	18. Benzodiazepines	21. Amphetamines	20. Designer drugs such as hallucinogens	21. Other drugs
In the past week?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
In the past month?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
In the past year?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
a. Unplanned use	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
b. Desire/effort to cut down	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
c. Time spent using/ recovering	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
d. Craving/compulsion to use	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
e. Role obligation failures	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
f. Social/ Interpersonal Problems	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
g. Sacrificing activities	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
h. Dangerous use	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
i. Physical/emotional problems	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
j. Tolerance	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
k. Withdrawal symptoms	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
l. Legal problems	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes	☐ No ☐ Yes

1. Sub-questions for each substance are only asked if there is a positive indication of use for each substance.

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22. Age of first standard drink:

Age in years:

23. Age of first drug use:

Age in years:

24. Number of different substances used in past week including alcohol:

Total substances:

25. Injection history:

- ☐ Never injected
- ☐ Have injusted in the past
- ☐ Currently injecting

25b. How often do you inject?

- ☐ Never
- ☐ Less than once in a month
- ☐ Greater than once in a month
- ☐ Once a week or more
- ☐ Daily

25c. Do you share materials (needles, straws, or other tools for using drugs)?

- ☐ Yes
- ☐ No

26. Have you received treatment for a substance use disorder before?

- ☐ Yes
- ☐ No

26b. How many months has it been since your last treatment:

In months:

27. How supportive or non-supportive do you think the following people would be to you during treatment?

	No contact/ NA	Not supportive	Somewhat unsupportive	Neutral	Somewhat supportive	Very supportive
27a. Spouse/mate/partner	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27b. Closest friend	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27c. Father	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27d. Mother	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27e. Brother	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27f. Sister	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27g. Other close family member	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27h. Other close friends	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27i. Fellow workers	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Mental Health Concerns

28. In the past 30 days have you experienced the following (not due to substances)?

			If so, how bothered are you about it?				
			Not at all	Slightly	Moderately	Considerably	Extremely
28a. Serious Depression	☐ Yes	☐ No	☐	☐	☐	☐	☐
28b. Anxiety or tension	☐ Yes	☐ No	☐	☐	☐	☐	☐
28c. Hallucinations	☐ Yes	☐ No	☐	☐	☐	☐	☐
28d. Trouble concentrating	☐ Yes	☐ No	☐	☐	☐	☐	☐
28e. Trouble remembering	☐ Yes	☐ No	☐	☐	☐	☐	☐
28f. Intrusive thoughts of past events	☐ Yes	☐ No	☐	☐	☐	☐	☐

29. Are you currently seeing a mental health professional?

☐ Yes

☐ No

30. Have you ever taken or are you currently taking any medication for psychological/psychiatric conditions?

- ☐ Never
- ☐ In past
- ☐ Currently
- ☐ Both past and currently

31. Are you currently taking medication for pain?

- ☐ Yes
- ☐ No

31b. If taking medication for pain, are you taking it:

- ☐ As prescribed
- ☐ Less than prescribed
- ☐ More than prescribed

31c. If taking medication for pain is it opioid based?

- ☐ Yes
- ☐ No

Legal Issues

32. How many times have you been arrested in the last 12 months?

Number of times:

33. Are you mandated to treatment by the court or correctional system?

- ☐ Yes
- ☐ No

LOCATOR FORM

Thank you for your help with this research! You shared a lot of information with us about how you are doing and how you are feeling. This information will be kept private. To complete the research, we will need to contact you approximately one month, three months, six months, nine months and one year from today. To do this, we need some information about where and how to reach you and your preferences on the best way to do this. We will keep this information separate from your interview files and it will be kept in a locked cabinet.

1. What address and phone numbers would be best to use when we need to reach you?

Street Address*

City

State

Zip Code

Home Phone

Work Phone

Mobile Phone

2. Is there an address at which you can receive mail other than the address above?

Street Address*

City

State

Zip Code

Home Phone

Work Phone

Mobile Phone

Alternate Contact Information

3. Please provide information of at least one family member or friend who knows how to reach you:

Full Name

Street Address*

City

State

Zip Code

Home Phone

Work Phone

Mobile Phone

Relationship

4. Do you have an AA, NA, DRA, or other self-help group sponsor or fellow that would know how to reach you?

Full Name

Street Address*

City

State

Zip Code

Home Phone

Work Phone

Mobile Phone

Relationship

5. Is there a residence where you visit/stay frequently?

Whose place is it?

Street Address*

City

State

Zip Code

Phone

Relationship

6. Are there any other people who may know of your whereabouts, such as a doctor, caseworker, community clinic, or counselor that you see regularly?

Full Name

Street Address*

City

State

Zip Code

Home Phone

Work Phone

Mobile Phone

Relationship

*Street, Apartment Number, P.O. Box

7. Are you currently on probation/parole?

- ☐ Yes
- ☐ No

7a. If yes, which one?

- ☐ Probabtion
- ☐ Parole

7b. When did it start?

Month

Year

7c. When does it end?

Month

Year

7d. Name of supervising official

Full Name

Street Address*

City

State

Zip Code

Phone

Please answer the following questions by marking "Yes" or "No".

8. May we ask clinical staff or review your medical record at _____ to collect additional phone numbers, addresses, or other contact information if necessary?

- ☐ Yes
- ☐ No

9. When we contact you or contact others who may know of your whereabouts, it is OK to say that we are with _____? We will not share any information about your treatment only that you are participating in "The National Survey".

- ☐ Yes
- ☐ No

If we cannot reach you on the phone, we may email and text message you. Again, the survey will be referred to as "The National Survey" to protect your confidentiality.

You have completed the survey.
Thank you for participating in the study!

*Street, Apartment Number, P.O. Box

DISCHARGE REMINDER FORM

Date Participant was Discharged:

Date:

SAMPLE TEXT:

When you enrolled in treatment, you also enrolled in a research study. As a reminder:

Our organization is conducting research on the impact of treatment. Now that you are no longer in treatment, you will be contacted on the phone (or via email) for several confidential follow-up surveys throughout the course of the next year. The information collected from the surveys will help us understand how to improve services for individuals who receive addiction treatment services. Thank you in advance for participating in this research!

If participant was not discharged, please indicate why:

- ☐ Deceased
- ☐ Didn't complete program
- ☐ Incarcerated
- ☐ Left without being discharged
- ☐ Refused
- ☐ Other

FOLLOW-UP FORM

Facility Name[1]

Interviewer

Patient ID[2]

Full Name

Date of Birth

Current Date

Research Coordinator: Follow-up:

- ☐ 1 month
- ☐ 3 month
- ☐ 6 month
- ☐ 9 month
- ☐ 12 month

Research Coordinator: Please ask the participant their Date of Birth to confirm their identity. Only complete survey if DOB matches.

- ☐ Yes, DOB matches
- ☐ No, DOB does not match
- ☐ No, client refused to confirm DOB
- ☐ No, did not speak with client/ unable to complete survey

Research Coordinator: If unable to complete this survey with the patient, please indicate why:

- ☐ Deceased
- ☐ In treatment
- ☐ Incarcerated
- ☐ Refused
- ☐ Unable to locate

1. Field to be completed by research coordinator.
2. Field to be completed by research coordinator.

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CONTINUED CARE AND SELF-HELP GROUPS[1]

1. How often did you attend the following in the last month/in the last three months (SINCE, DATE)?

	Never/ stopped	Once a month or less	Several times a month	At least once a week
1a. Formal aftercare	☐	☐	☐	☐
1b. AA	☐	☐	☐	☐
1c. NA	☐	☐	☐	☐
1d. Other support group	☐	☐	☐	☐

2. In the last month/in the last three months (SINCE, DATE) how troubled were you by:

	Not Troubled At All	Somewhat Troubled	Very Troubled
2a. Being bored	☐	☐	☐
2b. Being under stress	☐	☐	☐
2c. Being anxious	☐	☐	☐
2d. Being nervous	☐	☐	☐
2e. Feeling uncomfortable	☐	☐	☐
2f. Feeling restless	☐	☐	☐
2g. Craving alcohol	☐	☐	☐
2h. Craving drugs	☐	☐	☐

1. **Note:** at the one-month follow-up participants will be asked "in the last month." In subsequent follow-ups participants will be asked "in the last three months". Online surveys can auto fill a date that is one or three months from the interview date.

SUBSTANCE USE

3. How long have you used any of the following in the last month/in the last three months (SINCE, DATE)?

	No Use	Used less than a week	Used more than a week
3a. Alcohol (beer, wine, hard liquor, spirits, mouthwash, etc.)?	☐	☐	☐
3b. Marijuana (pot, weed, grass, hash, THC, dope, wax, marijuana vapes, drops, edibles, etc.)?	☐	☐	☐
3c. Cocaine (coke, snow, crack, rock, blow, etc.)?	☐	☐	☐
3d. Heroin (H, smack, junk, horse, skag, skunk, dope, black, etc.)?	☐	☐	☐
3e. Prescription opioids (Oxycodone, Hydrocodone, Oxy, Roxy, Percocet, Roxicet, Endocet, Xarmetis, Fentanyl, Dilaudid, codeine, morphine, Oxycontin, methadone, Vicodin, etc.)?	☐	☐	☐
3f. Other opioids (Krok [Krokidil], Desomorphine, opium, poppy, etc.)?	☐	☐	☐
3g. Methamphetamine (meth, crank, ice, etc.)?	☐	☐	☐
3h. Benzodiazepines (Benzos, Xanax, Valium, Librium, Diazepam, Alprazolam, Clonazepam, Klonopin, Lorazepam, Ativan, etc.)?	☐	☐	☐
3i. Amphetamines (Ritalin, Adderall, Concerta, Dexadrine, Strattera, Vyvanse, beans, black beauties, dexies, pep pills, speed, uppers, etc.)?	☐	☐	☐
3j. Designer drugs such as hallucinogens (LSD, acid, NBOMes, Mescaline, peyote, mushrooms, etc.), MDMA (ecstasy, molly), MDPV (bath salts, Ketamine, Special K, PCP, Angel Dust, etc.), synthetic cannabinoids (spice, formaldehyde, dips, etc.)?	☐	☐	☐
3k. Any other drugs taken not as prescribed or directed (including steroids and any others not listed)?	☐	☐	☐

4. In the past month/three months (SINCE, DATE), what was your longest period of abstinence from non-prescribed substances in weeks?

Weeks:

5. How many different substances have you used in the past week, including alcohol and prescription drugs not used as prescribed?

Number:

6. Which of the following have you experienced related to substance use in the last month/three months (SINCE, DATE)?

	No	Yes	N/A
6a. Used longer than intended	☐	☐	☐
6b. Neglected some usual responsibilities	☐	☐	☐
6c. Wanted to cut down or stop using	☐	☐	☐
6d. Others objected to your use	☐	☐	☐
6e. Preoccupied about using (thinking about it a lot)	☐	☐	☐
6f. Used to relieve emotional distress	☐	☐	☐
6g. Other negative experiences	☐	☐	☐

7. Have you received services for a substance use disorder from another program or provider?

☐ Yes
☐ No

8. If yes, was this provider recommended by the previous program or provider?

☐ Yes
☐ No

9. Are you taking any medication for your substance use disorder?

☐ Yes
☐ No

10. If yes, are you taking it only as prescribed?

☐ Yes
☐ No

11. If taking a medication for a substance use disorder, have you missed taking it more than once or twice in a week?

☐ Yes
☐ No

12. Are you taking any medication for a mental health condition?

☐ Yes
☐ No

13. If taking a medication for mental health disorder, have you missed taking it more than once or twice in a week?

☐ Yes
☐ No

TREATMENT RATINGS[1]

14. How helpful have the following treatment components been to you?

	Not helpful	A little helpful	Somewhat helpful	Very helpful	Not applicable
14a. Group Therapy	☐	☐	☐	☐	☐
14b. Individual counseling	☐	☐	☐	☐	☐
14c. Lectures and education	☐	☐	☐	☐	☐
14d. Working the AA/NA steps	☐	☐	☐	☐	☐
14e. Peer group meetings (e.g. AA)	☐	☐	☐	☐	☐
14f. Family portion of program	☐	☐	☐	☐	☐
14g. Talking with other patients	☐	☐	☐	☐	☐
14h. Overall rating of the program	☐	☐	☐	☐	☐

1. Treatment ratings are asked at the 3-month follow-up.

SERVICE SUMMARY FORM

Facility Name[1]
Interviewer
Patient ID[2]
Full Name
Date of Birth
Current Date

1. Please indicate the duration of services you have received in each of the following, since (INTAKE DATE):

	Duration of Service
1a. Days of outpatient detoxification	
1b. Days of inpatient detoxification	
1c. Days of medically managed inpatient	
1d. Days of medically monitored inpatient	
1e. Days of clinically managed residential	
1f. Days of population-specific residential	
1g. Days of low intensity residential	
1h. Days of monitored sober living	
1i. Hours of partial hospitalization services	
1j. Hours of intensive outpatient services	
1k. Hours of outpatient services	
1l. Hours of early intervention/pretreatment	

1. Field to be completed by research coordinator.
2. Field to be completed by research coordinator.

2. Please indicate your current treatment status, since (INTAKE DATE):

- ☐ Did not engage in treatment
- ☐ Stepped up to higher level of care
- ☐ Trasferred to another provider
- ☐ Discharged for noncompliance
- ☐ Left against staff advice
- ☐ Successfully completed intensive treatment phase and I will no longer be with this program
- ☐ Successfully completed intensive treatment phase and I plan to be in continuing care with this program

3. Did you follow all treatment recommendations?

- ☐ Yes, all recommended services were delivered
- ☐ No, I refused some or all of treatment for personal reasons
- ☐ No, due to funding/reimbursement limitations
- ☐ No, due to unavailability of services
- ☐ No for other reasons (please specify):

4. How was your treatment funded?

- ☐ Insurance
- ☐ Self pay
- ☐ Combination of insurance and self-pay
- ☐ Other:

5. Was the funding for your treatment sufficient or all services required?

- ☐ Yes
- ☐ No

6. Which of the following program components did you utilize during treatment?

	Not used/ not applicable	Once or twice	More than once or twice	Weekly	Several times per week
6a. Group Therapy	☐	☐	☐	☐	☐
6b. Individual counseling	☐	☐	☐	☐	☐
6c. Lectures and education	☐	☐	☐	☐	☐
6d. Working the AA/NA steps	☐	☐	☐	☐	☐
6e. Peer group meetings (e.g., AA)	☐	☐	☐	☐	☐
6f. Family portion of program	☐	☐	☐	☐	☐

7. Were any of the following medications administered?

7a. Detox medications (non-opiate)	☐	Yes
	☐	No
7b. Opiate taper medications	☐	Yes
	☐	No
7c. Psychotropic medications	☐	Yes
	☐	No
7d. Anti-craving medications (non-opiate)	☐	Yes
	☐	No

8. Were opiate replacement maintenance medications prescribed?

8a. Buprenorphine (Subutex®)	☐	Yes
	☐	No
8b. Buprenorphine-naloxone (Suboxone)	☐	Yes
	☐	No
8c. Vivitrol extended release Naltrexone	☐	Yes
	☐	No
8d. Naltrexone in other form	☐	Yes
	☐	No
8e. Methadone	☐	Yes
	☐	No
8f. LAAM	☐	Yes
	☐	No
8g. Other	☐	Yes
	☐	No

If yes, please specify:

9. Were you diagnosed with any of the following conditions during treatment?

9a. Major depressive episodes	☐	Yes
	☐	No
9b. Bipolar episodes	☐	Yes
	☐	No
9c. PTSD	☐	Yes
	☐	No
9d. Other trauma disorder	☐	Yes
	☐	No
9e. Anxiety disorder(s)	☐	Yes
	☐	No
9f. Psychosis/schizophrenia	☐	Yes
	☐	No
9g. Antisocial personality	☐	Yes
	☐	No
9h. Other	☐	Yes
	☐	No

10. What arrangements have you made for continuing services? (Check all that apply.)

- ☐ Regularly scheduled appointments here (continuing care)
- ☐ Referred to another provider for continuing care
- ☐ Given contact for services as needed
- ☐ Currently participating in peer-support groups
- ☐ Continues in facility-sponsored non-treatment meetings/activities
- ☐ Continues to receive services for mental health issues
- ☐ Other arrangement (please specify):

11. How supportive or non-supportive were the following people during your treatment?

	No contact/ NA	Not supportive	Somewhat unsupportive	Neutral	Somewhat supportive	Very supportive
11a. Spouse / mate/ partner	☐	☐	☐	☐	☐	☐
11b. Closest friend	☐	☐	☐	☐	☐	☐
11c. Father	☐	☐	☐	☐	☐	☐
11d. Mother	☐	☐	☐	☐	☐	☐
11e. Brother	☐	☐	☐	☐	☐	☐
11f. Sister	☐	☐	☐	☐	☐	☐
11g. Other close family member	☐	☐	☐	☐	☐	☐
11h. Other close friends	☐	☐	☐	☐	☐	☐
11i. Fellow workers	☐	☐	☐	☐	☐	☐

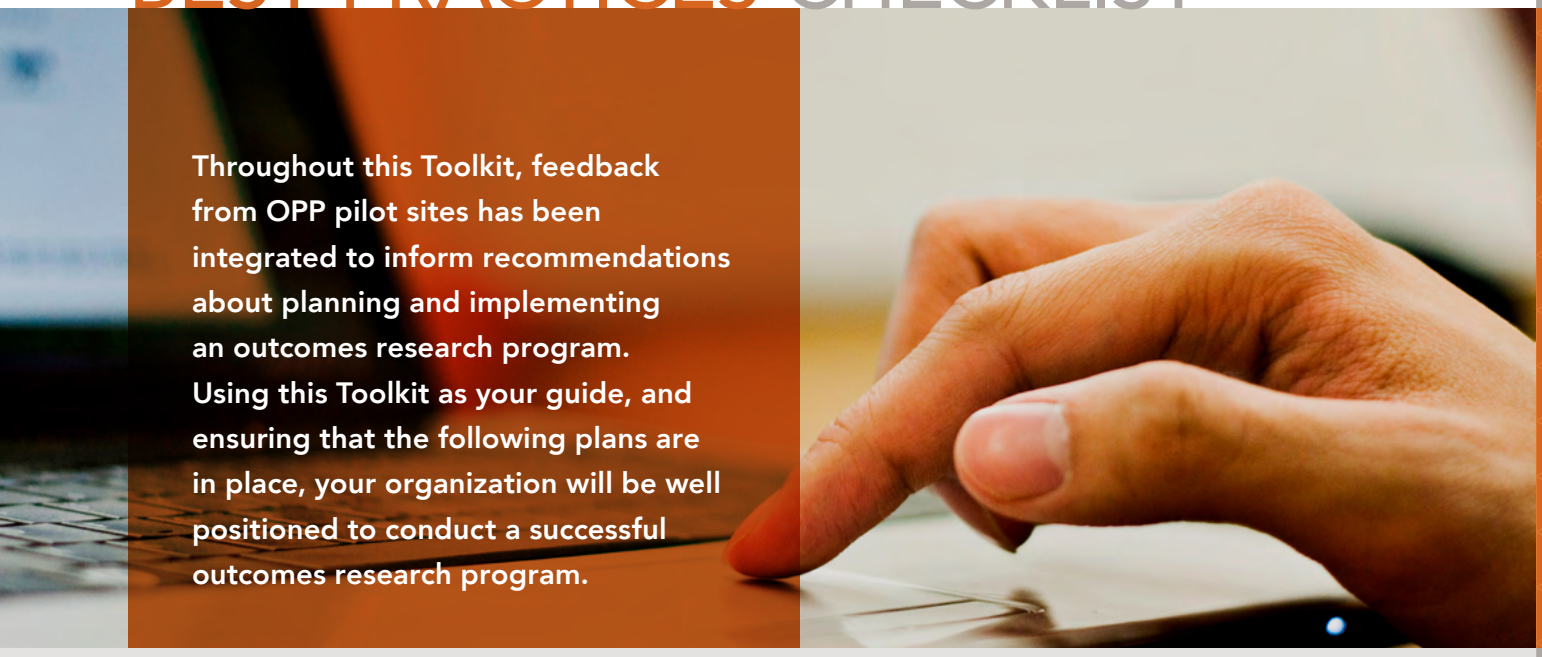
REPORTING OUTCOMES DATA

Reporting allows organizations to communicate activities, findings, and lessons learned, as well as monitor and track progress. Reporting also allows organizations to be transparent to funding agencies, partners, and stakeholders. When planning for reporting, include what types of findings will be shared, when, how, and to what audiences. Consider reporting the following data:

- Participant characteristics, including demographics, substance use, and treatment history so that audiences understand the population served.
- Treatment information, including family support during treatment, so that audiences understand the services and supports participants received during treatment as well as participant satisfaction with services.
- Follow-up rates so that audiences understand what proportion of participants have outcome data and generalizability of data.
- Outcomes, including substance use and abstinence rates, mental health, and aftercare post-treatment.

Data may be reported in static reports that are provided to key stakeholders throughout the process and/or through dashboard reports that allow for data monitoring on an ongoing basis. Remember, when reporting outcomes findings, it is important to include both positive findings as well as areas for improvement. Limitations, such as utilizing a convenience sample, low enrollment into the study, non-experimental designs, and low follow-up rates, if applicable, should be addressed when reporting data.

BEST PRACTICES CHECKLIST



Throughout this Toolkit, feedback from OPP pilot sites has been integrated to inform recommendations about planning and implementing an outcomes research program. Using this Toolkit as your guide, and ensuring that the following plans are in place, your organization will be well positioned to conduct a successful outcomes research program.

- ☐ Our organization has a clear plan for ethical engagement with human participants in research, including IRB review if necessary.
- ☐ Our organization has a clear research plan, including identified research questions and protocols, and surveys to address our research questions.
- ☐ Our organization has the infrastructure in place to conduct outcomes research, including but not limited to, staff training protocols, management of staff turnover, and plans for monitoring and reporting data.
- ☐ Our organization has a clear data management plan to track all data collected from patients with secure data storage.
- ☐ Our organization has a clear data collection plan, including setting appropriate target sample sizes and plans for monitoring and managing participant follow-up rates.
- ☐ Our organization has a clear staffing plan, including leadership appointed to oversee the project and research staff to implement the research.
- ☐ If necessary, our organization has identified and engaged research partners to effectively conduct an outcomes research program, including an IRB, external evaluators, and/or a data management firm.

APPENDIX A:
FAQS FROM THE OPP

This Appendix includes questions that were frequently asked during the OPP. The answers provided below are meant to serve as guidelines and are based on experience from the OPP. Some questions may or may not be relevant to your organization's processes or research plan.

Please note that the Q&A below specifically pertains to the guidelines set forth in the OPP. Your organization may make different decisions about who is eligible to enroll in outcomes research. If you follow different enrollment guidelines, ensure that you follow appropriate consent procedures, particularly when considering minors and other vulnerable populations.

ENROLLMENT

Q: Who is eligible to be enrolled in this type of research study?

OPP A:
All clients over the age of 18 who voluntarily enroll in treatment. The only reasons you should not enroll a client in the study are if they are under 18, mandated to treatment, or if they decline to participate.

Context:
The OPP was designed to examine outcomes for adult patients (18+) who sought treatment services voluntarily. As such, minors and individuals mandated to treatment were not eligible for the study.

Q: Are individuals on probation eligible to enroll?

OPP A:
Yes, if they have voluntarily entered treatment they are eligible to enroll in the study. Individuals whose treatment is court mandated or mandated by the terms of their probation are not eligible to enroll in the study.

Context:
Examining the impact of treatment for individuals who were mandated to treatment was beyond the scope of the OPP. Should programs wish to study impact for those mandated, they should follow ethical guidelines for vulnerable populations.

Q: How many participants should I enroll in the study?

OPP A:
Enrollment is offered to all eligible clients who enter treatment until up to [125] participants are enrolled.

Context:
Determining the appropriate sample size is critical to capture enough information to understand patient outcomes and conduct statistical analyses that answer your research questions. In addition to your research design, there are other factors to consider when determining sample size, including staff and financial capacity, as well as the size of your program and how quickly new patients are admitted.

FOLLOW-UPS

Q: When does follow-up data collection start?

OPP A:
Follow-up data collection is conducted at 1, 3, 6, 9, and 12 months after a participant's intake date.

Context:
The OPP elected to contact participants at frequent intervals during the year after intake to treatment so that outcomes could be monitored frequently and so that participant engagement remained high. Your organization may set different guidelines for follow-up data collection, however, uniformity in when data are collected is important to maintain the integrity of the data.

Q: How do we respect confidentiality when asking others to contact/reach participants for follow-ups?

OPP A:
Use a code name such as 'The National Survey' when making follow-up calls. Do not mention the name of your organization if the participant did not give their consent to do so. If anyone other than the participant answers the phone, or if you are calling a participant's contact, do not disclose that the participant is enrolled in a research study or had been receiving treatment services.

Context:
As discussed elsewhere in the Toolkit, maintaining participant confidentiality is a critical component of ethical practices in data collection. Using a code name for the study ensures that you will not disclose that participants have received substance use treatment, if participants do not wish for that information to be shared with others.

Q: How often should I try to reach a participant for follow-up?

OPP A:
It is recommended to try and reach participants at least twice a week during each follow-up window. More frequent contact may yield better follow-up rates. Providers should initiate follow-up efforts as soon as the follow-up window opens for each participant. When the follow-up window closes you will no longer be able to collect data for that timepoint.

Context:
Maintaining high follow-up rates is a challenge in longitudinal studies, particularly with substance using populations. Frequent attempts to contact participants can help with maintaining high follow-up rates. Please refer to the Data Collection Checklist in the Toolkit for additional considerations.

Q: How many times do you call the participant if you get voicemail?

OPP A:
If you get a participant's voicemail you can leave a message if the participant gave their consent to leave a voicemail. If there is a number where the participant can call you back, leave that number on the voicemail. You should continue to attempt to reach the participant at least twice a week for the entire follow-up window.

Context:
Your organization should have specific protocols for reaching participants and leaving messages. Please refer to the Protocol for Follow-up in the Toolkit for additional information.

Q: If a participant is not reached during the one-month follow-up period, are they contacted again for the three-month follow-up

OPP A:
If you do not reach a participant during the window for the one-month follow-up, you should still try to contact that participant again for the three-month follow-up. Participants should remain eligible for the study regardless of whether they are reached at each follow-up window.

Context:
Even if a participant cannot be reached in a designated follow-up period, they may still be reachable in future follow-up windows. We recommend that participants remain eligible for each follow-up survey administration period even if they cannot be reached at a given point in time.

INCENTIVES

Q: If we are a 90-day program, can we offer incentives to participants while they are still in treatment?

OPP A:
Yes, you can offer incentives to participants while they are still in treatment. You may elect to give incentives for each completed follow-up upon discharge from your program.

Context:
Your program should determine guidelines for incentive distribution that are reasonable, fair, and appropriate for the populations you serve.

Q: When should participants receive gift cards?

OPP A:
Participants should receive gift cards by mail upon completion of each follow-up survey.

Context:
You should set clear expectations with participants upfront about when and how they will receive incentives, if they are offered. You may also elect to distribute incentives electronically, if appropriate for the population you serve.

STUDY DOCUMENTS – SERVICE SUMMARY

Q: What is the service summary form?

OPP A:
The service summary form is an extra set of questions that should be administered during the 3-month survey.

Context:
The service summary form asks additional questions about participants' experience in treatment. For the OPP, it was administered at the 3-month timepoint as that was a time when all patients had been discharged from residential treatment (whether in a 30- or 90-day program). You may determine that a different timepoint is more appropriate depending on the length of your treatment program, but we recommend that all participants enrolled in your study complete the Service Summary Form at a set follow-up timepoint.

Q: What are some examples of criteria for the different types of services asked about in the first question in the Service Summary form: "Please indicate the duration of services you have received in each of the following, since (INTAKE DATE)."

OPP A:

Outpatient Detox	"Daily" treatment at a hospital or other facility • Initial assessment (intake, physical, ordering lab studies, initiation of detox treatment) takes 1-2 hours • If combined w/hospital day program, sessions can last several hours per/day • Follow-up visits range from 15-30 minutes • Treatments range from 3-14 days
Inpatient Detox	24-hour, on-site care, nursing, or medical staff
Medically Managed Inpatient	24-hour, on-site care, nursing, or medical staff Participants with severe unstable problems such as: • Are a danger to themselves or others • Need acute psychiatric care • High medical risks
Medically Monitored Inpatient	Medically-directed, but non-hospital, 24-hour level of care • Care monitored by nurses, addiction physicians, and addiction credentialed clinicians in an acute care inpatient setting • Treatment focuses on biomedical/emotional/behavioral conditions • Can include medically monitored community residential treatment
Clinically Managed Residential	24-hour care w/trained counselors to stabilize multidimensional imminent danger • Help prepare participant for outpatient treatment • Participants receive multi-level, co-occurring services from designated addiction treatment, mental health, and general medical personnel providing a range of services
Population-Specific Residential	• Age • Gender • Addiction specific

Low Intensity Residential	Halfway house, sober living, or other extended care program • Helps participants apply recovery skills to prevent relapse, promote personal responsibility, guide reintegration into family/work life • 24-hour structured environment • Receive at least 5 hours of professional addiction services per week • Typically enter upon completion of or with ongoing treatment in other "levels" of service
Monitored Sober Living	Example of *Low Intensity Residential*
Partial Hospitalization **Services/ Intensive Outpatient Services**	Treatment services delivered during the day, before or after work/school, evenings, or weekends • Programs may provide essential education/treatment components • Allow participants to apply their newly acquired skills in "real world" environments • May arrange additional medical/psychiatric consultation
Outpatient Services	Organized, non-residential services
Early Intervention **Pretreatment**	Professional services for early intervention constitute a service for specific individuals

Q: Do the service summary questions refer only to the first level of care?

OPP A:
The service summary questions refer to the ASAM levels of care or resources. For more information, please visit: http://www.asam.org/asam-home-page.

Q: What are some relevant medications for response options in Question 7 in the form: Were any of the following medications administered? Detox (non-opiate), Opiate taper medications, Psychotropic medications, or anti-craving medications (non-opiate).

OPP A:

Detox Meds (non-opiate)	Clonidine; Opioid antagonists: Narcan, Naloxone, Naltrexone; Librium or other Benzo tapers
Opiate Taper Meds	Suboxone; Methadone; Subutex
Psychotropic	Antipsychotics (Thorazine); Anti-Depressants (Wellbutrin); Anxiety (Xanax)
Anti-craving	Topiramate (Topomax); BACLOFEN (Lioresal or Gablofen®); Naltrexone; Disulfiram (Antabuse); Campral (Acamprosate); Ondansetron (Zofran); Chantix (Varenicline); Gabapentin (Neurontin)

Q: What are some additional tips to increase follow-up rates?

OPP A:

- Reassure participants that their information is confidential and will not be shared with others, including health or treatment information.
- When participants provide phone numbers, ask how long they have had their number and if they anticipate changing it soon. If so, gather additional phone numbers. Ask participants to keep you informed of any phone, address, or email changes.
- Check in with participants on a regular basis to see if there are any changes to the information they provided on the locator form and if so, update this in their records.
- Inform participants that you will start by calling their primary phone numbers and only move on to additional locator form information if the primary phone numbers are unsuccessful.
- Explain to participants how the study benefits your organization, them, and future funding. Emphasize the importance of research to continually improve care for patients.
- Designate a staff member with dedicated time to collect follow-up survey data.

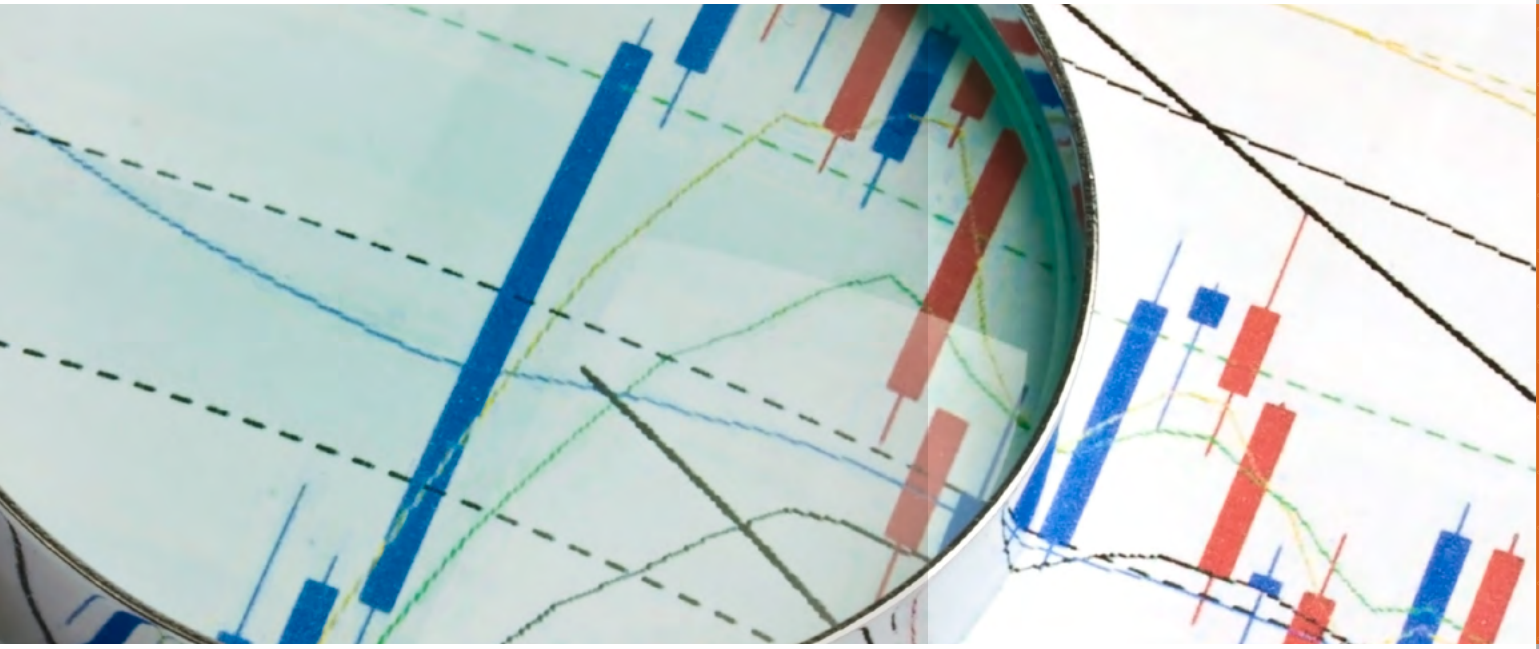
Context:
See additional tips in the follow-up protocol of the Toolkit.

APPENDIX B: RELIABILITY AND DISTRIBUTION INFORMATION FOR KEY SCALES

BACKGROUND INFORMATION

In substance use treatment research, it is important to examine not only individual items that assess particular behaviors (e.g., past 30-day use of a particular substance), but also key constructs of interest (e.g., severity of use). Combining individual items on a survey to create a scale is a useful way to examine areas of interest and strengthen measurement. For the OPP, we developed scales for severity of substance use according to DSM 5 criteria and for negative feelings and cravings. To ensure the usability of the scales, we examined their reliabilities and distributions. Reliability tests assess the appropriateness of combining items into a scale and distribution analyses assess how respondents are scoring across the continuum. Furthermore, distribution analyses allow researchers to determine appropriate statistical tests based on the spread of the dependent (or outcome) variable. This appendix provides information on the reliability and distribution for scales calculated from the NAATP OPP surveys.

APPENDIX B: RELIABILITY AND DISTRIBUTION INFORMATION FOR KEY SCALES



Reliability

The reliability of each scale was assessed by calculating Cronbach's alpha, a measure of internal consistency. Cronbach's alpha values can range from 0 to 1; a higher Cronbach's alpha coefficient indicates that respondents answered related questions in a similar way, supporting their aggregation into a single scale. According to social science standards, a scale's Cronbach's alpha coefficient generally should be greater than 0.70. When alpha coefficients are lower than this, it is not advisable to combine responses and interpret scale scores. As shown on following pages, all the scales calculated from the NAATP OPP surveys were above the 0.70 threshold.

Distribution

The distribution of a scale shows all possible values of the data and how often they occur in a given set of responses. The "shape" of the distribution can be used to understand how scales assess a construct with a given sample. The commonly known normal distribution is characterized by a bell shape, in which the largest frequency of responses occurs in the midpoint of the scale, and a decreasing number of responses fall on either side. However, there are many other distribution shapes; for example, a bimodal or double-peaked distribution indicates that individuals who responded to the survey items were more likely to fall on either end of the scale, rather than in the middle; a right-skewed distribution indicates that individuals who responded to the survey items were more likely to fall on the lower end of the scale than the higher end. The distributions for each scale calculated from the NAATP OPP surveys are shown on the following pages.

RELIABILITY AND DISTRIBUTION OF INTAKE DSM-5 CRITERIA SCALES

OPP survey items were used to assess DSM-5 levels for eleven substance types; specifically, alcohol, marijuana, cocaine, heroin, prescription opioids, other opioids, methamphetamines, benzodiazepines, amphetamines, hallucinogens, and other drugs. If participants indicated using the substance in the past year, they were asked to respond to 11 items that assessed the degree to which they met DSM-5 diagnosis criteria for a substance use disorder for that substance.

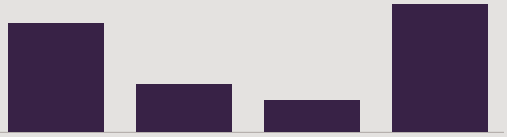
These items were assessed only at intake. For each substance, responses across the 11 items were used to calculate the DSM-5 level scale, a discrete scale that includes four categories:

Did not meet criteria (0 yes responses)

Mild (1-3 yes responses)

Moderate (4-6 yes responses)

Severe (7-11 yes responses)[1]

KEY	Substance Name (sample size)			
Reliability	Cronbach's *Alpha Value*			
Distribution				
% of Valid Responses	35	15	10	40
Category	Did not meet criteria	Mild	Moderate	Severe

1. https://pubs.niaaa.nih.gov/publications/dsmfactsheet/dsmfact.pdf
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3767415/

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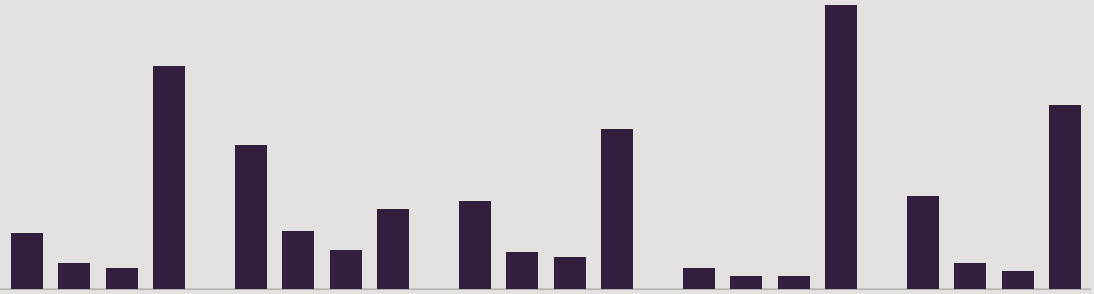
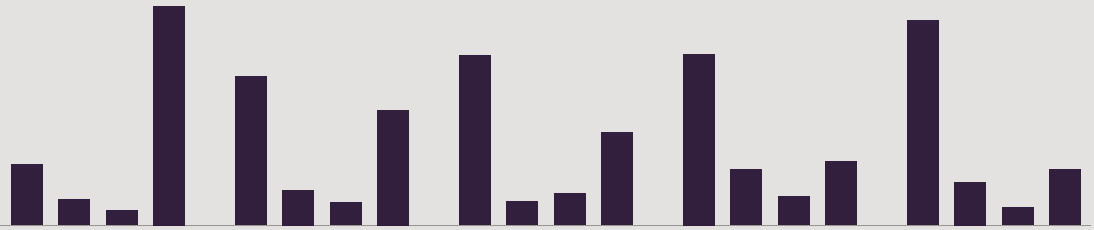
Substance	Alcohol *(n = 656)*	Marijuana *(n = 359)*	Cocaine *(n = 250)*	Heroin *(n = 195)*	Rx Opioids *(n = 258)*
Reliability	0.93	0.91	0.94	0.93	
Distribution					
% of Valid Responses	17 7 6 70	45 18 12 25	28 12 10 50	6 3 3 88	29 8 5 58

Figure 1. Reliability and Distributions of the DSM Criteria Scales.

Reliability was very high for each substance. Distributions varied for each substance, but were generally bimodal, indicating that participants were more likely to indicate responses on either end of the severity continuum.

Substance	Meth *(n = 111)*	Benzo *(n = 331)*	Amphetamines *(n = 148)*	Hallucinogens *(n = 100)*	Other Drugs *(n = 63)*
Reliability	0.95	0.95	0.95	0.93	0.92
Distribution					
% of Valid Responses	19 8 5 68	46 11 7 36	53 8 10 29	54 17 9 20	64 14 5 17

Note: The reliability and distribution for the DSM Criteria for other opioids were not reported due to a low sample size (n =11).

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RELIABILITY AND DISTRIBUTION OF NEGATIVE FEELINGS AND CRAVINGS SCALE

OPP survey items were combined to create a single scale that assesses the extent to which participants experienced negative feelings and cravings for substances after leaving treatment. All participants were asked to respond to eight items that assessed the degree to which they were troubled by negative feelings (the six feelings assessed were: bored, stressed, anxious, nervous, uncomfortable, restless) and their cravings for substances (the two substance categories assessed were: drugs and alcohol). These items were assessed at each follow-up and are shown in the Follow-up Form in the Surveys section of the Toolkit.

Responses across the eight items were averaged to calculate a single continuous scale that ranged from one (not at all troubled) to three (very troubled). The reliability and distribution analysis indicated that the scale was reliable and that participants were using the full range of responses.

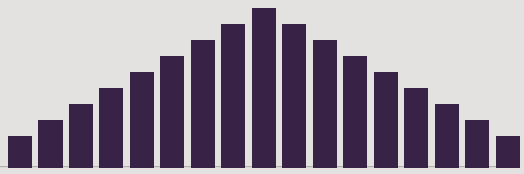
KEY	*(sample size)*	
Reliability	Cronbach's Alpha Value	
Distribution % of Valid Responses		
Response Range	1	Example Data 3
Category	Not at all troubled	Very troubled

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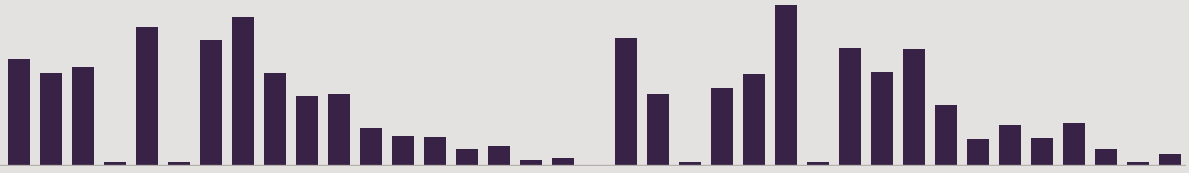
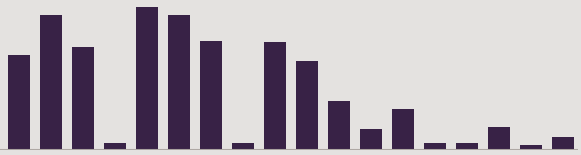
Figure 2. Reliability and Distributions of the DSM Criteria Scales.

Reliability was adequately high at each follow-up. Distributions are generally right-skewed, indicating that participants were more likely to indicate responses on the lower end of the scale.

Follow-up	1 Month *(n = 434)*	3 Months *(n = 335)*
Reliability	0.80	0.82
Distribution		
	1 3	1 3

Follow-up	6 Months *(n = 314)*	9 Months *(n = 269)*
Reliability	0.79	0.82
Distribution		
	1 3	1 3

Follow-up	12 Months *(n = 250)*
Reliability	0.81
Distribution	
	1 3

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ADDICTION TREATMENT PROVIDER OUTCOMES

PILOT PROGRAM FINAL REPORT

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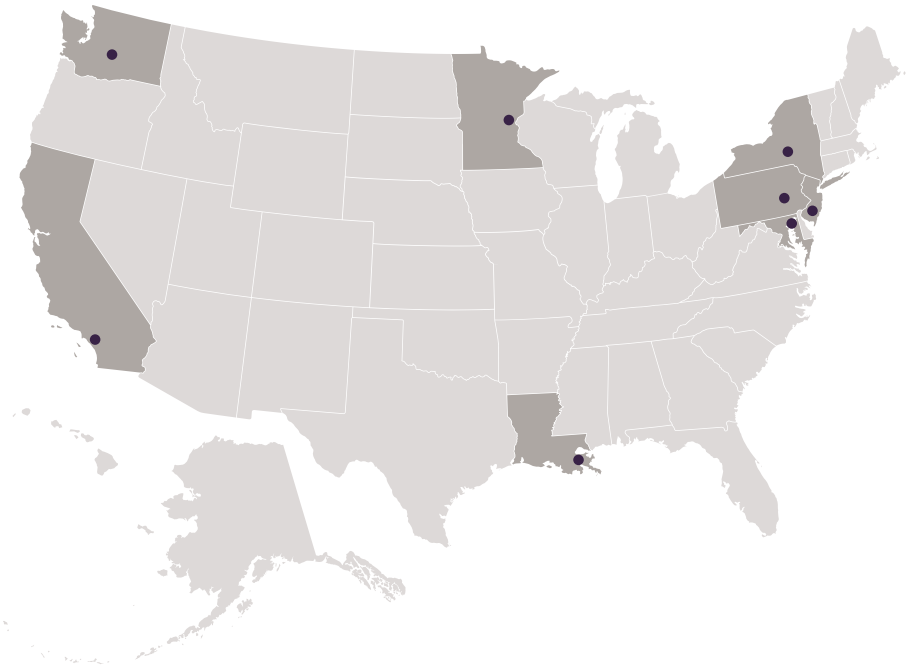
INTRODUCTION

The National Association of Addiction Treatment Providers (NAATP or The National Association) is a national professional organization of addiction treatment service providers and supporters. The mission of The National Association is to provide leadership, advocacy, training, and member support services to assure the availability and highest quality of addiction treatment.

The OMNI Institute accelerates positive social change by supporting the public, nonprofit, and philanthropic sectors around the country with integrated research and evaluation, capacity building, and data utilization solutions. For over 20 years, OMNI has partnered with stakeholders and providers across the spectrum of substance use prevention, treatment, and recovery, to conduct research and support implementation of best practices.

In 2016, NAATP, in partnership with Jessica Swan, NAATP Outcomes Project Manager and OMNI, launched the Outcomes Pilot Program (OPP), a nationwide assessment designed to measure long-term outcomes for patients who receive inpatient substance use disorder services. ■

EIGHT OF NAATP'S MEMBER ORGANIZATIONS PARTICIPATED IN THE OPP



Outcomes Pilot Program Sites

Ashley Addiction Treatment
Havre De Grace, MD

Avenues Recovery
Metairie, LA

Caron Treatment Centers
Wernersville, PA

Hazelden Betty Ford Foundation
Center City, MN

New Directions for Women
Costa Mesa, CA

Seabrook
Bridgeton, NJ

Sundown M Ranch
Yakima, WA

Tully Hill Chemical Dependency Treatment Center
Tully, NY

FINAL REPORT

Study Objective

The primary objective of the OPP was to conduct a pilot study of treatment outcomes using rigorous and replicable social science methods to serve as a foundation for cultivating best practices in outcomes research for substance use treatment. This goal was met and both a process and a measurement tool were piloted that the treatment field can utilize to engage in uniform data collection and reporting of patient outcome data. A secondary goal of the OPP was to examine the relationship between treatment and short- and long-term outcomes for patients using the data collected through the OPP. The results of this data exploration are presented in this report.

OMNI worked collaboratively with NAATP staff to define research questions and associated data collection measures. Data collection began in September 2016. The longitudinal pilot assessed data collected from participants at multiple time points between intake and one-year post-intake to treatment. To protect the welfare of the study participants, all study materials were reviewed and approved by Advarra, an Institutional Review Board (IRB). In addition, a Certificate of Confidentiality (CoC) was issued by the National Institute on Drug Abuse (NIDA) to further protect participant data from forced disclosure.

This report complements the NAATP Addiction Treatment Outcomes Measurement Toolkit (The Toolkit) outlining best practices for outcomes data collection. If you would like to learn more about OMNI's role in developing this report or are interested in the Toolkit and how you can use it at your facility, please contact OMNI at 800-279-2070 or omni@omni.org.

The OPP is the first project of its kind conducted by NAATP. Having successfully completed the project and using lessons learned, NAATP intends to follow this work with additional studies to address the larger continuum of addiction treatment services, including interventions such as outpatient care and interventions that address various components of the biological, psychological, social, and spiritual facets of addiction.

METHODS

Approach

At discharge, staff should remind participants The OPP tracked data collected from 748 participants at eight treatment facilities from intake through the year following their intake to residential treatment. Data were collected via self-report surveys that were adapted from the National Outcomes Recording and Monitoring System (NORMS) surveys developed by Norman G. Hoffmann. Three different surveys (intake, follow-up, and service summary) were administered over six different time points. All participants consented to participating in the study and provided contact information during intake. Intake surveys were administered in-person by facility staff and entered into an online database. Follow-up surveys were administered over the phone by facility staff or OMNI staff at 1-month, 3-months, 6-months, 9-months, and 12-months post-intake. The service summary was administered over the phone by facility staff or OMNI staff at 3-months post-intake.

The intake survey collected information about patient demographics, substance use history, treatment history, family support, mental health concerns and legal issues. The follow-up surveys collected information about continued care, substance use, and psychological well-being. The service summary asked specific questions about the treatment experience. Because the longest program participating in the pilot was 90-days[1], it was expected that all participants be discharged by the 3-month follow-up. The service summary was included as part of the 3-month survey and collected information about treatment ratings, treatment status, funding, program components, family support, medications, continuing services, and mental health concerns. Across all surveys, participants could skip questions. Because of this, percentages may not sum to 100% in this report due to missing data.

For additional information about the OPP surveys please reference the Toolkit.

1 .The program length at each facility varied. Because of this, all follow-up windows were calculated from intake to be consistent across all study sites.

Statistical Significance

Tests of statistical significance were used in the analyses reported below. Statistical significance is indicated by the probability (p-value) that the patterns of observed findings are due to chance alone. The range of p-values is from 0 to 1; the smaller the p-value, the smaller the likelihood that the observed change is due to chance alone.

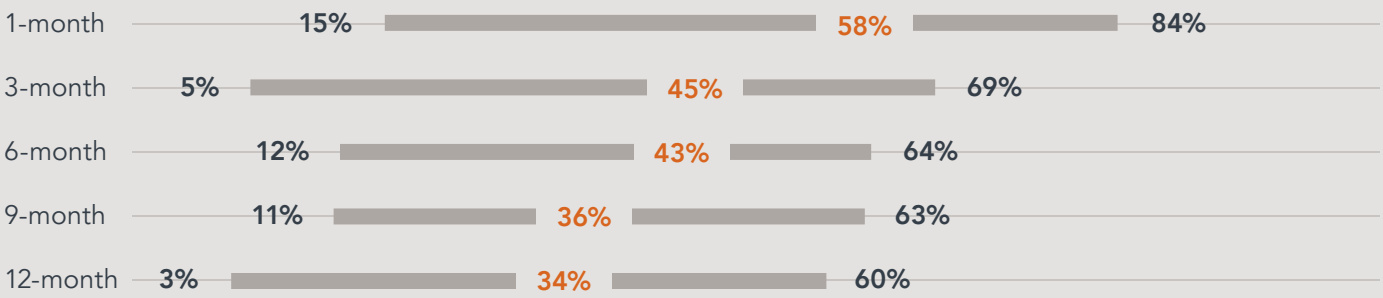
The standard benchmark for statistical significance in social science is a p-value of less than .05, indicating that the probability that an observed change is due to chance alone is less than 5%. When a test of statistical significance was conducted for this report, the corresponding p-value is noted in the text (for example, $p < .05$).

Participation in the Study Over Time

Follow-up rates for survey completion at each timepoint are presented below. Follow-up rates were calculated based on the number of participants enrolled in the OPP study. The grey bars represent the range of follow-up rates across facilities.

One-third (34%) of evaluation participants completed the 12-month follow-up survey.

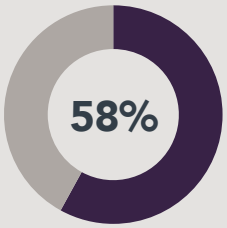
There was a wide range of follow-up rates across treatment facilities at each time point.



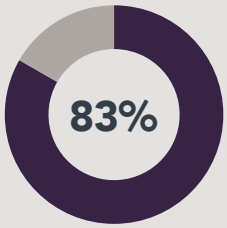
The results presented in this report include only data from individuals who participated in each follow-up. Therefore, results may not be generalizable to the participants who were not reached. For example, at the 12-month follow-up point, 66% of participants could not be reached, and conclusions about these participants cannot be drawn. An assessment of differences in characteristics between participants who were reached for follow-up assessment and participants who could not be reached indicated that participants who were younger and participants with less formal education (those with no high school diploma or a high school diploma/GED) were less likely to be reached for follow-up ($p < .05$). This suggests that the results of the OPP may be less generalizable to these specific populations. ■

PARTICIPANT DEMOGRAPHICS

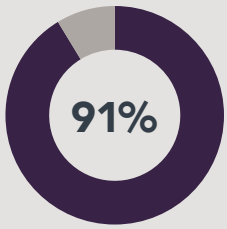
Study participants ranged in age from 18 to 74, with a mean age of 37 years.



of participants identified as male



of participants identified as non-Hispanic



of participants identified as White

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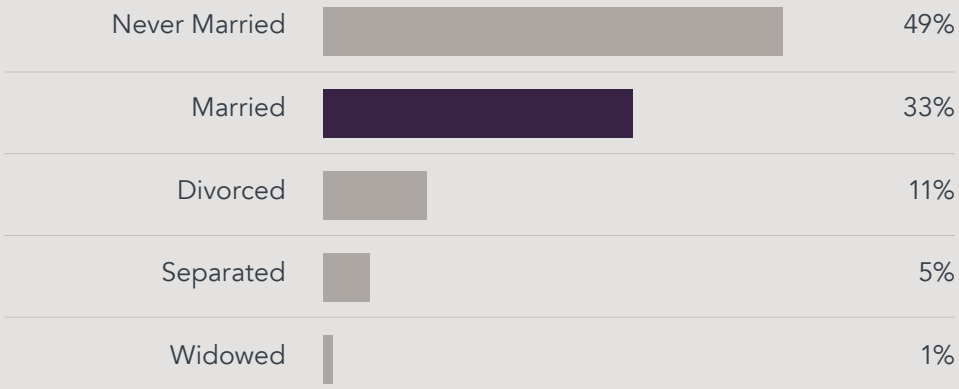
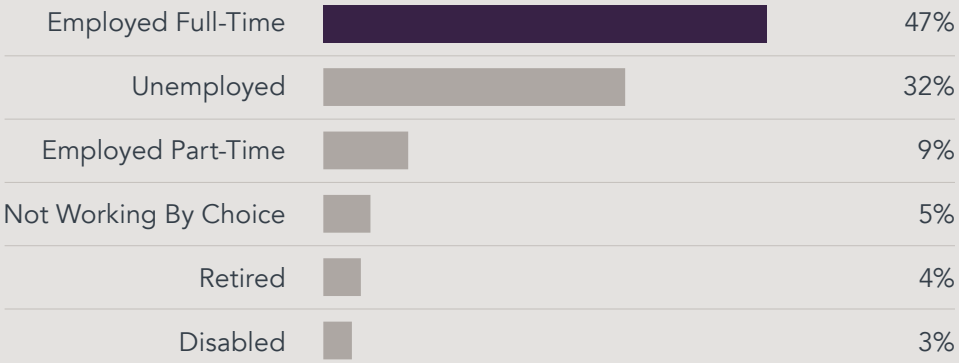
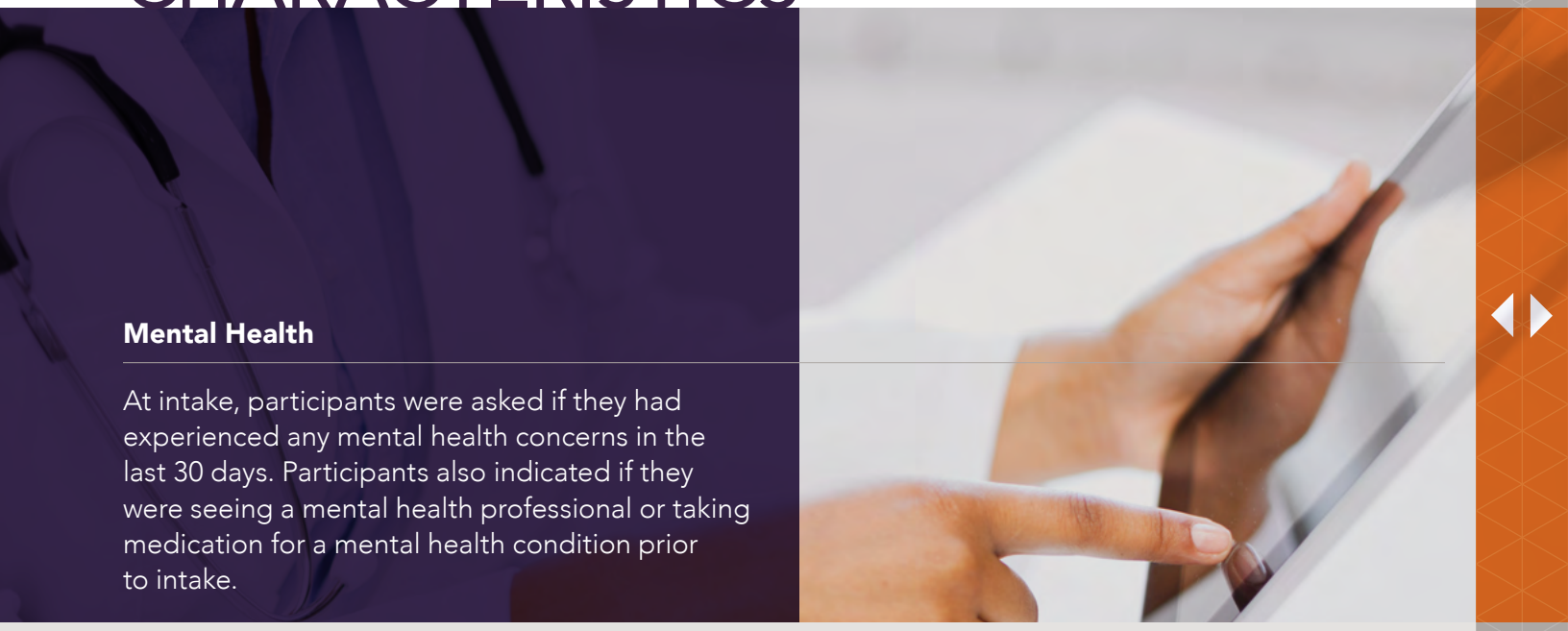
One out of three participants was married at intake to treatment



Nearly half of participants were employed at intake to treatment.
Close to one third of participants (32%) were unemployed.

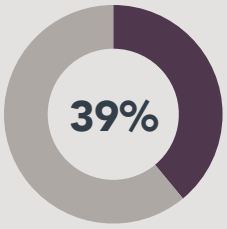


PARTICIPANT CHARACTERISTICS

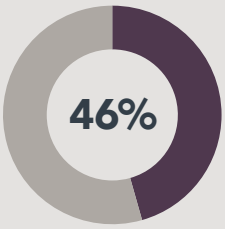


Mental Health

At intake, participants were asked if they had experienced any mental health concerns in the last 30 days. Participants also indicated if they were seeing a mental health professional or taking medication for a mental health condition prior to intake.

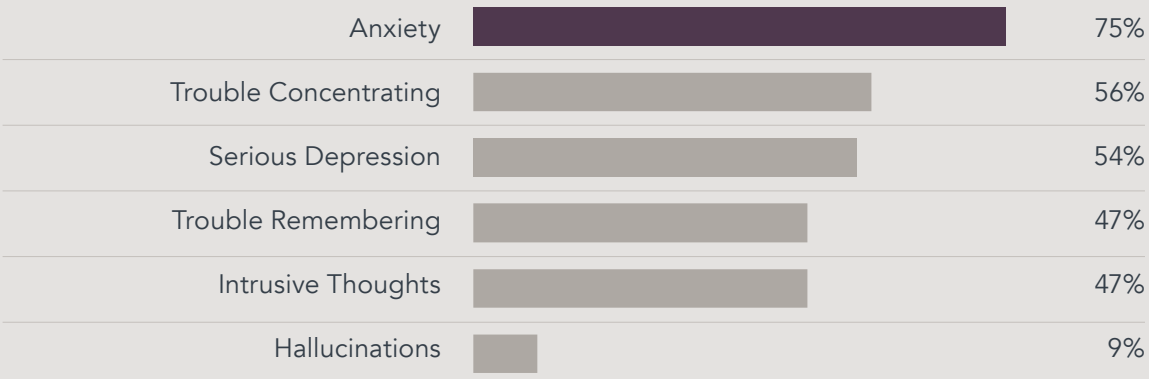


of participants were seeing a mental health professional



of participants were taking medication for a mental health condition

Three quarters of participants reported experiencing anxiety in the past 30 days.
Over half of participants reported experiencing serious depression (54%).



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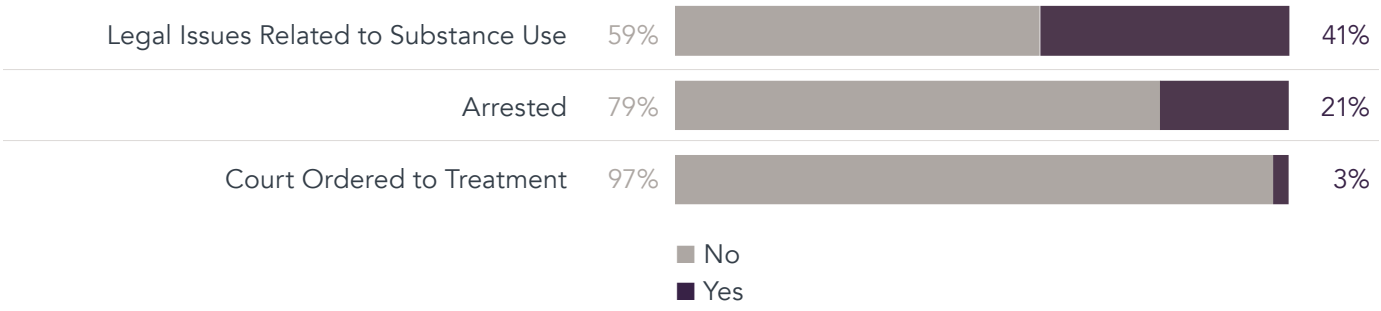
Legal Issues

At intake, participants answered several questions about legal issues. For each substance they had used in the previous year, participants indicated if they had experienced legal problems as a result of using that substance. In addition, participants disclosed if they had been arrested or were mandated to seek treatment from a court or correctional system.

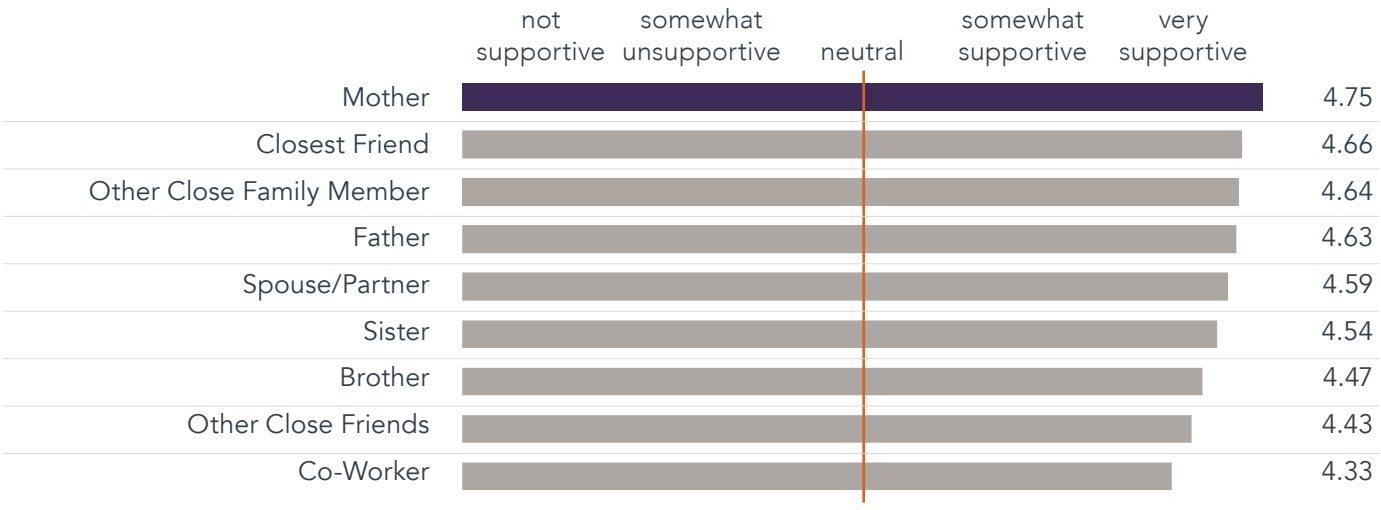
One out of five participants had been arrested in the past 12 months.
Only 19 participants (3%) were mandated to treatment by a court or correctional system.



Family Support

As part of the intake survey, participants were asked about the extent to which their friends and family were supportive of their treatment on a five-point scale (1 = not supportive, 2 = somewhat unsupportive, 3 = neutral, 4 = somewhat supportive, 5 = very supportive). Responses were averaged to create a mean response value. Participants could also indicate that they had no contact with a particular friend or family member; these responses were not included in the mean value.

Participants felt their friends and family were highly supportive of their treatment, with mothers being rated as most supportive.
All ratings of family support were significantly above the scale midpoint ($p < .05$).



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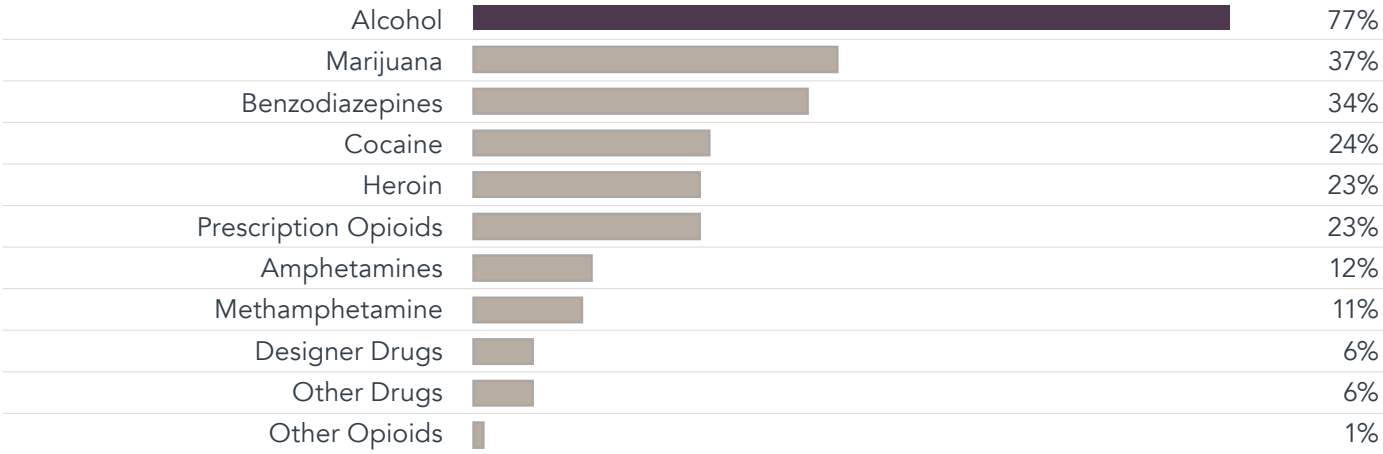
Substance Use and Treatment History

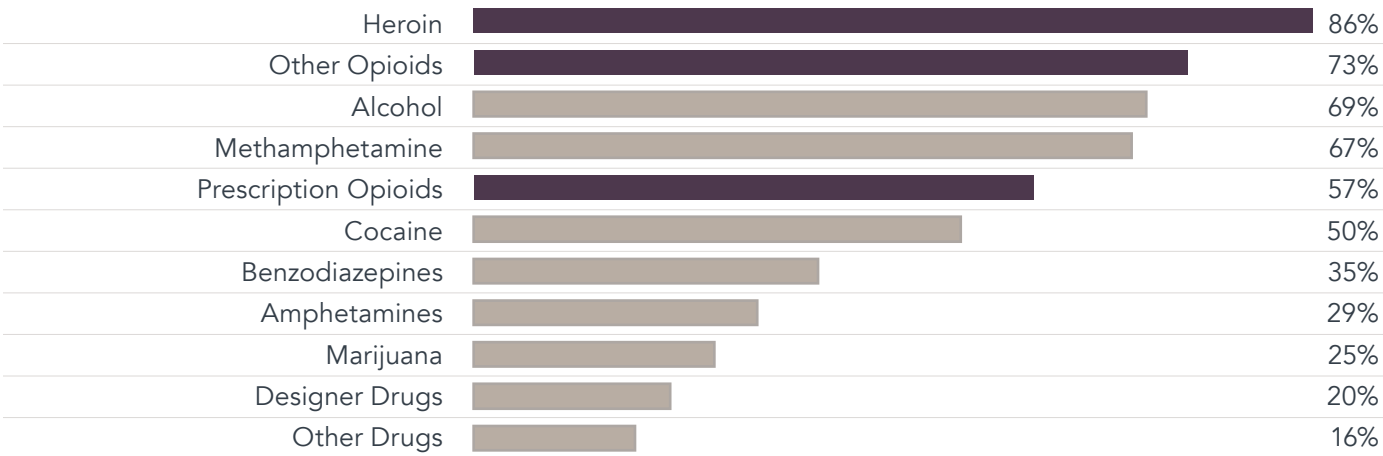
At intake to treatment, participants were asked about their substance use and treatment history. Sixty-two percent of participants had received treatment for a substance use disorder prior to admission. The amount of time since treatment ranged between 0 months and 30 years. The average time since treatment was 2 years and 5 months and the median was 10 months.

Three quarters of participants had used alcohol in the past month at intake to treatment.
Among participants who used heroin or prescription opioids, eight percent reported using both substances in the month prior to intake.



For any substance they had used in the previous year, participants answered eleven additional questions to determine if they met the DSM 5 criteria for a mild, moderate, or severe substance use disorder. The graph below displays the percentage of participants who met the criteria for a severe substance use.

The majority of participants who used opiates met the DSM 5 criteria for a severe substance use disorder.
More than half of participants who used alcohol or methamphetamine also met the DSM 5 criteria for a severe substance use disorder.



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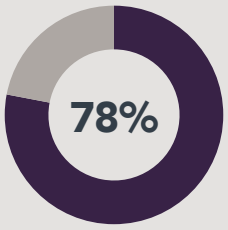
TREATMENT EXPERIENCE

Funding

On the service summary, administered at the 3-month follow-up, participants were asked the source of their treatment funding. Additionally, participants indicated if they felt that the funding for their treatment was sufficient for all required services.

Close to half of participants funded their treatment through insurance.

A similar percentage of participants funded their treatment via a combination of insurance and self pay.



of participants felt the funding for treatment was sufficient for all required services

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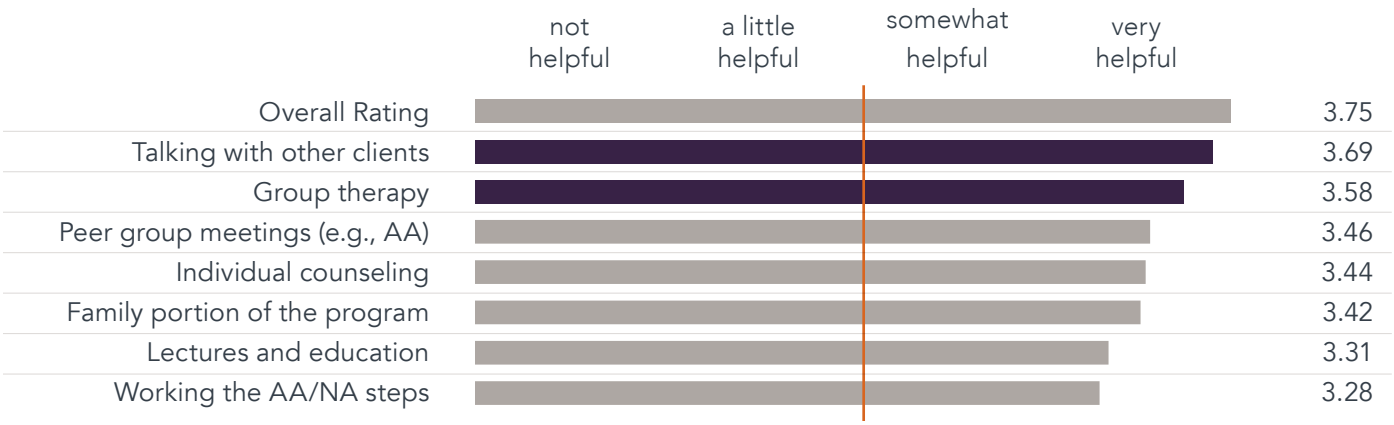
Helpfulness of Treatment

On the service summary, participants were asked to rate the helpfulness of eight treatment components. For each item, participants were asked to rate the helpfulness on a four-point scale (1 = not helpful, 2 = a little helpful, 3 = somewhat helpful, 4 = very helpful). Responses were averaged to create a mean response value shown below. Participants who indicated the treatment component was not applicable were not included in the mean value.

Participants found treatment to be highly helpful, talking with other clients and group therapy were rated as most helpful.

All ratings of treatment helpfulness were significantly above the scale midpoint ($p < .05$).



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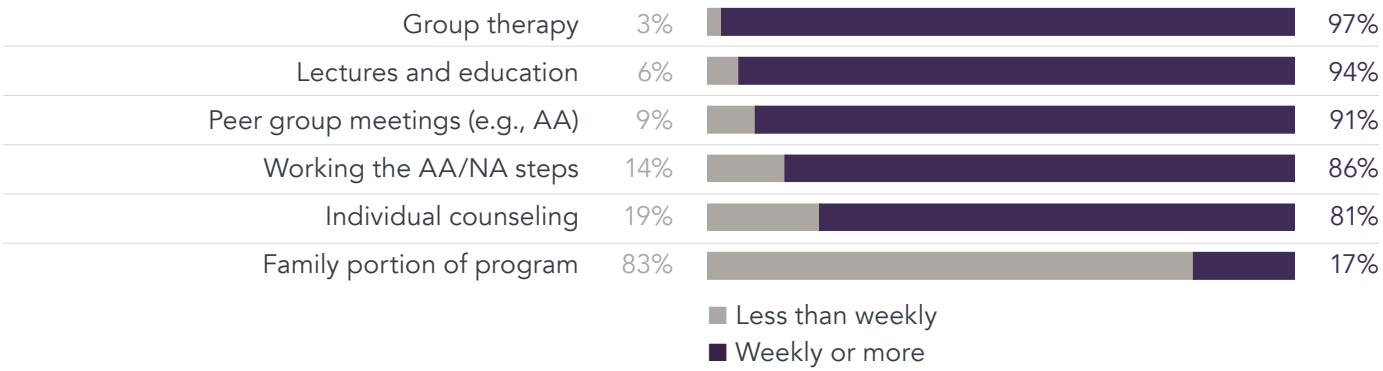
Treatment Components

On the service summary, participants were asked about the frequency with which they utilized each program component – once or twice, more than once or twice, weekly, or several times per week.

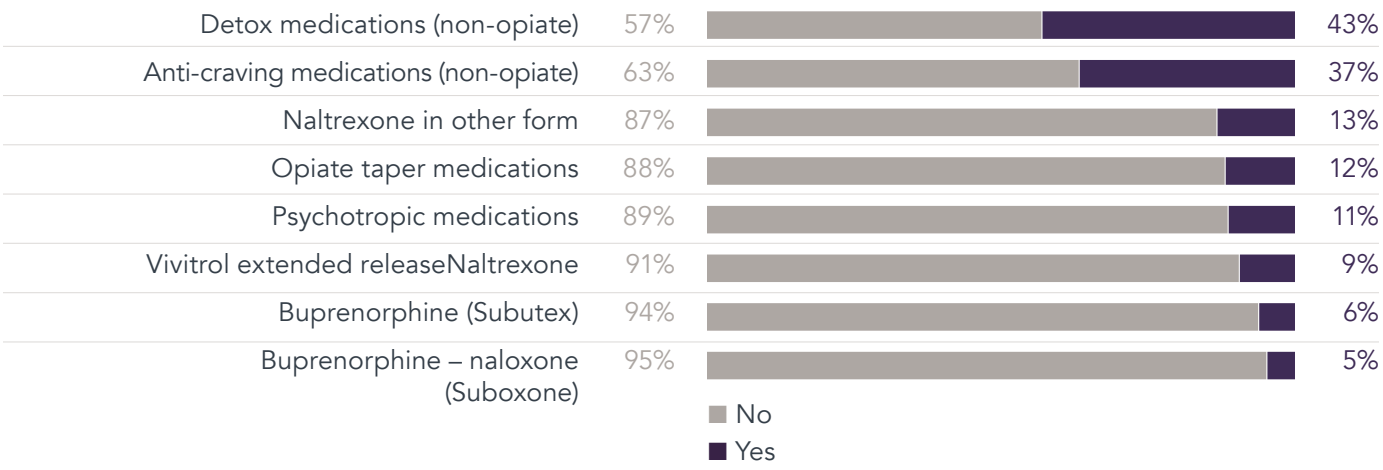
More than 90% of participants attended group therapy, lectures, and peer group meetings weekly or several times per week.



Medication During Treatment

On the service summary, participants reported medication that was administered or prescribed including opiate replacement maintenance medication. No participants reported being prescribed methadone or LAAM (opioid agonist) during treatment. Participants who were older and participants who used alcohol in the month prior to intake were more likely to report receiving medication during treatment ($p < .05$). Individuals who used alcohol were most likely to reporting taking detox medications (non-opiate) and anti-craving medications (non-opiate). Opiate use in the month prior to intake was not significantly associated with receiving medication during treatment.

Two out of five participants reported taking non-opiate detox medications during treatment.
Participants were less likely to report taking opiate replacement maintenance medications.



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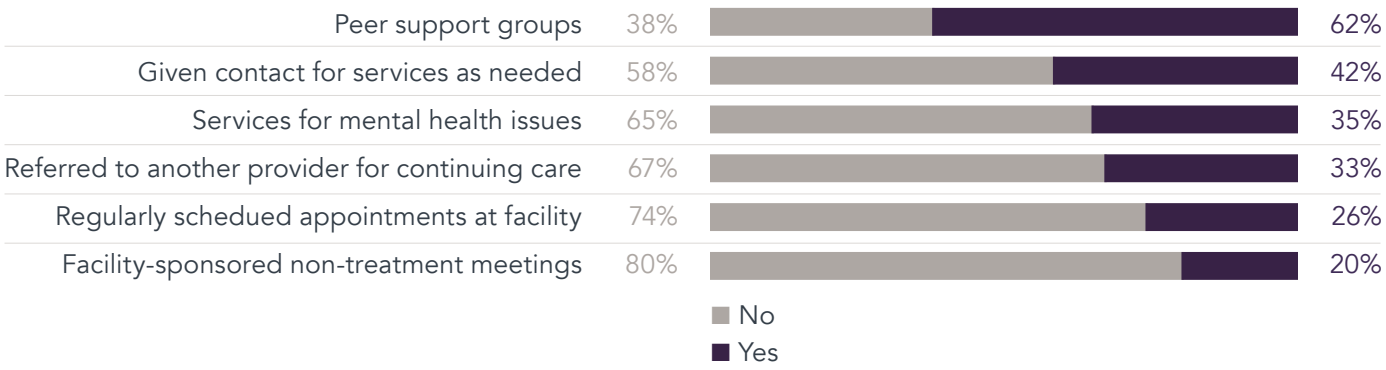
Continuing Services

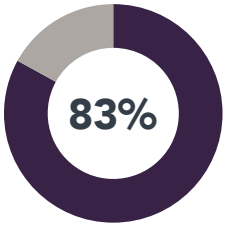
On the service summary, participants were asked about the arrangements they had made for continuing services.

Over half of participants had arranged to attend peer support groups as part of their plan for continuing care.

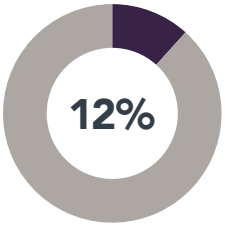


Status Upon Leaving Treatment

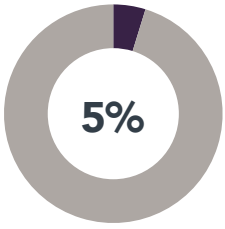
On the service summary, participants indicated their status upon leaving treatment. Among participants who successfully completed treatment, forty-two percent planned to engage in continuing care with the facility where they received treatment. Participants who did not complete treatment gave several reasons, including that they did not engage in treatment, were discharged for noncompliance, or left against staff advice.



of participants successfully completed intensive treatment phase



of participants did not complete treatment



of participants were transferred to another provider

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TREATMENT OUTCOMES

Negative Feelings and Cravings

On each follow-up survey, participants indicated the extent to which they experienced the following feelings – being bored, being under stress, being anxious, being nervous, feeling uncomfortable, feeling restless, craving alcohol, and craving drugs. Each item was rated on a three-point scale 1 = not troubled at all, 2 = somewhat troubled, 3 = very troubled. A reliability analysis to assess consistency across the eight items resulted in a Cronbach's alpha score above 0.70, indicating that the items could be combined into a single scale. The aggregate single score is presented in the following graph.

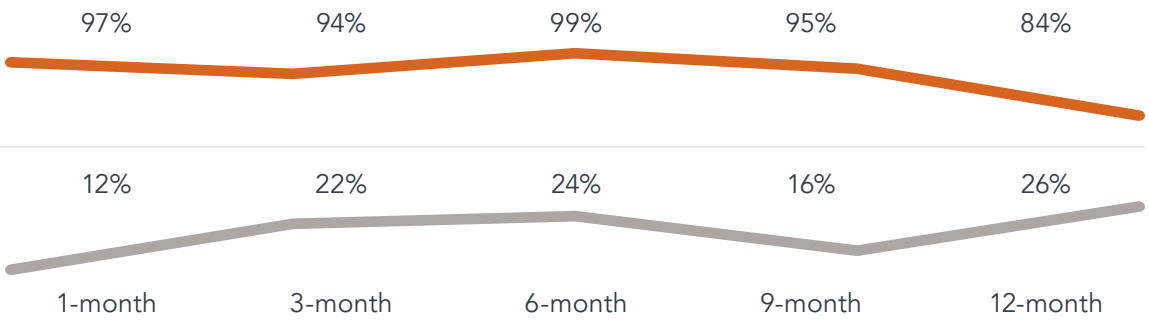
Participants' negative feelings and cravings for drugs and alcohol remained consistently low across the five follow-up time points.

Medication

Most participants did not take medication for their substance use disorder during the year following their intake to treatment. The number of participants taking medication for their substance use disorder declined from 26% at the 1-month follow-up to 7% at the 12-month follow-up. On each follow-up survey, participants who were taking medication were asked if they were taking it as prescribed. Additionally, participants indicated if they had missed taking their medication more than once or twice in a week. The following graph only includes data from participants who report taking medication at each time point.

At the 12-month follow-up one quarter of participants reported that they missed taking their medication more than once or twice a week.

Participants who reported taking their medication as prescribed were less likely to report missing medication. ($p < .05$)



Abstinence

For each follow-up survey, participants indicated if they abstained from substance use for the time period since they had last completed a survey. Participants were asked about substance use in the past month on the one-month survey, the past two months on the three-month survey, and the past three months on the six-month, nine-month, and twelve-month survey.

Participants were asked about their abstinence from eleven substances. The "Other Drugs" category included use of prescribed drugs and a positive indication on this variable could indicate use of prescription drugs that are not being abused (for example, blood pressure medication). Abstinence rates are calculated two ways: (1) abstinence from all substances and (2) abstinence from all substances, excluding responses to the "Other Drugs" category.[1]

Abstinence rates[2] were calculated based on the number of people who responded to each follow-up survey. The data do not reflect individuals who did not complete follow-up surveys.

Follow-up Survey	Number of Survey Respondents	Abstinence from All Substances	Abstinence Excluding "Other Drug" Usage
1-month	435	70% (304)	85% (368)
3-month	338	55% (186)	65% (219)
6-month	319	54% (172)	65% (207)
9-month	270	62% (168)	71% (191)
12-month	251	65% (164)	66% (166)

There were 118 participants who were reached for all five follow-up surveys.
Among this group, 46% reported being continuously abstinent for the year following their intake to treatment.

1. Survey revisions were made based on this learning from the OPP. This question was modified in the surveys produced for the Toolkit so that future data collection using the survey tools provides clearer distinction between illicit drug use and drug use, as prescribed.
2. Relapse rates in the data collected for the OPP are similar to rates for other chronic diseases such as hypertension and diabetes. See the Conclusion section of this report for additional information.

FACTORS PREDICTING ABSTINENCE

NAATP is interested in understanding what factors contribute to success in recovery. To explore this question, logistic regression was used to determine the factors that predict abstinence at 12 months. Multiple participant characteristics and their relationship to abstinence were assessed. **These factors included:**

- Demographic Characteristics (Age, Gender, Relationship Status, Education Level, Employment Status, Income)
- Mental Health Symptoms
- Prior Substance Use Disorder Treatment
- Number of Substances Used in Past 30 days at Intake
- Family Support
- Treatment Status
- Program Components
- Aftercare and Support Group Attendance
- Using of Medication Assisted Treatment (MAT)
- Duration of Services

Among all of the characteristics assessed, there were six characteristics that predicted abstinence at the twelve-month follow-up:

- Age
- Relationship Status
- Number of Substances Used in Past 30 days at Intake
- Successfully Completing Treatment
- Attending AA meetings
- Days Spent in Clinically Managed Residential Treatment

First, participant age was a predictor of abstinence. Participants who were older were more likely to be abstinent than participants who were younger ($p < .05$). This result should be interpreted cautiously, because younger participants were also less likely to be reached for the 12-month follow-up. It is possible that younger participants who were not reached for the 12-month survey were also abstinent. Alternatively, if younger participants were less likely to be abstinent, this may explain why they were less likely to participate in follow-up interviews.

Next, participants who were married when they entered treatment were more likely to be abstinent than those who were not married ($p < .05$). The number of substances used in the 30 days prior to intake was also a predictor of abstinence. Participants who report using fewer substances in the 30 days prior to intake to treatment were more likely to be abstinent at the 12-month follow-up ($p < .05$). Additionally, participants who successfully completed treatment were more likely to be abstinent ($p < .05$).

There was a significant relationship between attending AA meetings and abstinence such that the more frequently participants attended AA meetings after discharge from treatment, the more likely they were to be abstinent at the 12-month follow-up ($p < .05$). Finally, there was a significant relationship between the number of days spent in clinically managed residential treatment and abstinence such that the more days participants spent in clinically managed residential treatment, the more likely they were to be abstinent at the 12-month follow-up ($p < .05$). The other predictors outlined above were not related to abstinence.

As a final step, the six significant predictor variables were included in a logistic regression model. This approach provides information about the relative impact of each predictor, controlling for all other predictors. In other words, this model considers all of the predictors together, and determines which of them remain most significant. The results from this model showed that attending AA meetings was the strongest predictor of abstinence at the 12-month follow-up ($p < .05$). ■

CONCLUSION

NAATP engaged in a longitudinal pilot study, in collaboration with eight treatment sites and OMNI. The goals of the pilot were to cultivate best practices for conducting outcomes research for substance use treatment; to explore common outcomes measures for the field; and to examine the relationship between treatment and short- and long-term outcomes for patients. The OPP studied 748 participants across eight participating pilot sites and collected data from participants at intake, one, three, six, nine, and twelve months from intake to treatment. There was a wide range of follow-up rates across sites; on average follow-up rates ranged from 34% to 58% at each time point. At the twelve-month follow up, 34% of participants were reached for a follow-up survey.

Summary of Findings

The majority of study participants were single men who were employed at the time of their intake to treatment. Participants reported a high level of support from their friends and family to seek treatment. Alcohol was the most widely used substance in the 30 days prior to intake. Marijuana and benzodiazepines were also commonly used substances among participants. Participants found treatment to be very helpful and a majority of participants successfully completed treatment. Most participants reached for surveys reported that they were abstinent at each follow-up with 65% reporting that they were abstinent from all substances at 12-months post-intake. Among participants who were reached for all follow-up surveys (n = 118) 46% reported being continuously abstinent for the year following their intake to treatment. Attending AA meetings was found to be the strongest predictor of abstinence at the 12-month follow-up.

Research by The National Institute on Alcohol Abuse and Alcoholism (NIAAA) National Epidemiologic Survey on Alcohol and Related Conditions[1] found that drug use disorders were more common among men, individuals who identify as White or Native American, and those who are single or not married. The NIAAA study also found that younger individuals and those with lower income and education levels were also more likely to have a drug use disorder. The participants in the OPP shared some common demographic characteristics with the NIAAA study population – being majority male, White, and single. However, OPP participants had higher educational attainment and many were employed and had access to insurance to cover substance use treatment. These differences highlight the treatment gap between individuals who need and receive treatment. The 2017 National Survey on Drug Use and Health found that only 12.2% of individuals who need treatment for substance use disorders receive treatment[2]. Individuals who receive treatment are likely to have more resources (for example, financial, job flexibility, and family support) that allow them to seek treatment.

Addiction treatment poses unique research challenges. Relapse rates for addiction are similar to those for other chronic diseases such as diabetes, hypertension, and asthma[3]. However, when relapse occurs after addiction treatment it is often viewed in our culture as a failure of treatment. The chronic nature of addiction means that relapse is likely to occur. When relapse occurs, this indicates that additional treatment or alternate treatment is necessary not that treatment has failed.

Considerations for Implementation

A primary goal of the OPP was to cultivate best practices for conducting outcomes research for substance use treatment, resulting in the Toolkit. The guidance provided in the Toolkit draws on lessons learned from the OPP. Key lessons learned from implementation include the following:

- **Planning and Resource Allocation:** Careful planning and dedicated resources to outcomes research are critical for success. Organizations should consider staff time, data management systems, and systems for maintaining organizational knowledge in the event of staff turnover to sustain long-term, consistent data collection. Organizations that do not have in-house capacity for data collection or data management should consider partner research organizations.
- **Staff Training:** Staff who are responsible for data collection should be thoroughly trained in the purpose of outcomes data collection, how to talk with patients about outcomes data collection, best practices and ethical considerations for collecting data from human subjects, and best practices and practical tips for collecting data.
- **Participant Engagement and Follow-up:** Long-term retention of participants in research is imperative for the quality of data collected (in other words, it is important that follow-up rates remain as high as possible). Organizations should consider strategies for keeping participants engaged in outcomes research in the period after they leave treatment. Participant incentives, the way that research is explained to patients (for example, that it is confidential and important to organizational learnings to improve treatment), and alumni engagement/outreach are strategies for keeping patients engaged.

Limitations

There are several limitations to this study. Not all participants were reached for follow-up and conclusions about their outcomes cannot be made. An analysis of missing data revealed that participants who were younger and participants who had relatively less formal education (those whose highest level of education was a high school diploma or GED) were significantly less likely to be reached for follow-up. The results of this study may be less generalizable to these specific populations. Additionally, the sample in this study is a convenience sample and may not be representative of all individuals who seek treatment. ■

1. Grant BF, Saha TD, Ruan WJ, et al. Epidemiology of DSM-5 Drug Use Disorder: Results From the National Epidemiologic Survey on Alcohol and Related Conditions–III. JAMA Psychiatry. 2016;73(1):39–47. doi:10.1001/jamapsychiatry.2015.2132

2. NSDUH Annual National Report (2017) Retrieved from https://www.samhsa.gov/data/report/2017-nsduh-annual-national-report 6 National Institute on Drug Abuse (2018) How effective is drug addiction treatment? Retrieved from https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/how-effective-drug-addiction-treatment

3 .National Institute on Drug Abuse (2018) How effective is drug addiction treatment? Retrieved from https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/how-effective-drug-addiction-treatment

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