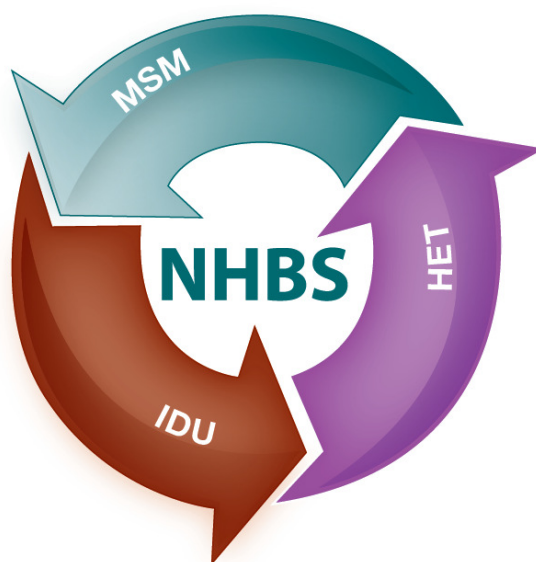


**National HIV Behavioral Surveillance:
Men Who Have Sex with Men, 2021
(NHBS-MSM2021)**

**FORMATIVE
ASSESSMENT
GUIDE**



NATIONAL HIV BEHAVIORAL SURVEILLANCE

**Behavioral Surveillance Team
NCHHSTP/DHAP/BCSB**

Version Date: January 29, 2021

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Contacts

Corresponding Author:

*Monica Adams, PhD, MPH
Epidemiologist
Centers for Disease Control and Prevention
1600 Clifton Rd, Mailstop US8-4
Atlanta, Georgia 30329
Telephone: (404) 718-5092; E-mail: madams6@cdc.gov*

Contributing Authors:

*Christine Agnew-Brune, PhD, MPH
Dita Broz, PhD, MPH
Johanna Chapin-Bardales, PhD, MPH
Paul Denning, MD
Senad Handanagic, MD, MPH
Michelle Johnson Jones, MPH
Dafna Kanny, PhD
Shamaya Whitby, MS*

General NHBS Inquiries:

E-mail: nhbs@cdc.gov

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1. Introduction

1.1 Background

This document is intended to provide guidance on formative assessment activities for NHBS-MSM2021 and is meant to supplement the *National HIV Behavioral Surveillance System in Men Who Have Sex with Men– Round 6: Formative Assessment Manual*. November 8, 2019.

Formative assessment this cycle will build on the experiences and formative activities from 2020 and focus specifically on the remaining gaps in knowledge to inform remote data collection and recruiting MSM using respondent-driven sampling (RDS). Due to anticipated COVID-19 safety concerns, MSM2021 recruitment and interviewing will be conducted remotely. RDS recruitment will utilize virtual coupons (e.g., images shared on a screen during a remote interview or sent as a message) and interviews will be conducted remotely via secure platforms. Several options will be available for HIV testing, including remote self-testing and in-person testing. This document covers formative assessment goals and topic areas, a brief overview of formative methods, and documents that will be submitted to CDC. For more detailed information on formative methods and suggested activities to garner community support, please see the *National HIV Behavioral Surveillance System in Men Who Have Sex with Men– Round 6: Formative Assessment Manual*. November 8, 2019, and the *National HIV Behavioral Surveillance, Injection Drug Use and Heterosexuals at Increased Risk for HIV – Round 5: Formative Assessment Manual*. December 15, 2018.

Due to the ongoing COVID-19 crisis, safety and health of project staff and participants is the priority. Project sites are expected to conduct formative assessment remotely over a period of approximately two months. Sites will complete and submit to CDC three documents for formative assessment (see section 2 of this document for more information), including:

- 1) an *implementation timeline* to facilitate cycle planning,
- 2) a *formative assessment plan* to describe planned formative methods, and
- 3) a brief *formative assessment report* to summarize findings.

1.2 Formative Assessment Goals

Goals of formative assessment for MSM2021 are listed below. Some may have been achieved during 2020, while others are specific to MSM2021 or need to be updated.

- Describe the peer network characteristics among MSM populations, and their willingness to recruit others.
- Identify potential “seeds,” or initial recruits for respondent-driven sampling (RDS).
- Obtain information needed for conducting remote data collection (including interviewing and HIV testing).
- Identify potential barriers to recruitment and participation and develop solutions to address them.
- Develop a plan to monitor operations and recruitment through ongoing formative assessment.
- Describe the social and demographic characteristics of the MSM population.
- Garner the support of the MSM community and its stakeholders.
- Develop questions of local interest for HIV prevention.

If your site plans to pilot virtual venue recruitment methods, work with your CDC project officer to determine what additional or alternate objectives will be needed. Sites should refer to the *NHBS-MSM6 2021 Virtual Venues Recruitment Guidance* or contact their CDC Project Officer.

2. Formative Assessment Documents

2.1 Overview

Project sites will submit to CDC an Implementation Timeline and a Formative Assessment Plan that outlines planned formative assessment methods. Key formative findings will be summarized in a Formative Data Report, which replaces Secondary and Primary Data Reports submitted during previous cycles. Table 1 summarizes the required documents for MSM2021 Formative Assessment. More information on each document is also provided below.

Table 1.

Document	Description	Due to CDC Project Officer	Feedback Due to Site
Implementation Timeline	Same as in prior NHBS cycles (Appendix A)	<i>Draft:</i> Feb 8 th <i>Final:</i> 1 week after receiving feedback from the CDC project officer	Approximately 1 week after submission to the CDC project officer
Formative Assessment Plan	Table that outlines site plans for formative assessment (Appendix B)	<i>Draft:</i> Feb 22 nd <i>Final:</i> 1 week after receiving feedback from the CDC project officer	Approximately 1 week after submission to the CDC project officer
Formative Data Report	Brief report focused on formative assessment goals	<i>Draft:</i> April 23 rd <i>Final:</i> 2 weeks after receiving feedback from the CDC project officer	Approximately 1 week after submission to the CDC project officer

2.2 Implementation Timeline

As in prior NHBS cycles, project sites will develop an Implementation Timeline for completing the various activities to prepare for NHBS implementation. See Appendix A for a model Implementation Timeline. Project sites should adapt this model based on their local activities and timelines (e.g., adding additional activities they want to track) to ensure on-time start of data collection. The timeline should be discussed with the site's Project Officer (PO) during regular calls and updated and re-submitted to the site's PO if changes are made.

2.3 Formative Assessment Plan

MSM2021 Formative assessment should focus specifically on current gaps in knowledge for remote data collection, including implementation of RDS among MSM interviewing and HIV testing. Each site should review information gathered in 2020, other relevant prior cycles, and

secondary data sources (e.g., results from local RDS or remote studies if available) to determine what information is still needed for MSM2021 and develop their plan accordingly. Table 2 presents some of the key questions to consider when planning for formative assessment, as well as possible data sources.

Table 2.

Formative assessment objective	Sample formative assessment questions	Possible data sources
Describe the peer network characteristics among MSM populations, and their willingness to use peer recruitment.	<ul style="list-style-type: none"> -What size are the networks of MSM (in-person and virtual)? -What are the demographic characteristics (age, race/ethnicity) of MSM networks? -Does network size vary among sub-populations? -What proportion of MSM networks interact in person vs. virtually? -How willing are MSM to recruit peers remotely (including online platforms)? -What are the demographic characteristics of MSM on various virtual platforms (i.e., for possible recruitment of seeds)? What are the characteristics of the MSM who do not use any virtual platforms? 	<ul style="list-style-type: none"> -Data from 2020 recruitment, if peer referral was used -Prior NHBS RDS surveys -2020 Primary and Secondary Data Reports -Prior peer-referral surveys with MSM, especially ones conducted in MSA -CKIs
Identify potential “seeds,” or initial recruits, for respondent-driven sampling (RDS).	<ul style="list-style-type: none"> -How many seeds are needed? -What diversity in seeds will be important to ensure representation of key sub-populations of MSM? - What are the characteristics of individuals with network ties to important sub-populations? -Is it feasible to recruit seeds on virtual platforms (e.g., terms of service of local apps, health department policies)? If so, how many will be needed? -What recruitment methods will be used for seeds who do not use virtual platforms? 	<ul style="list-style-type: none"> -PKIs -CKIs, Focus Groups, BIS -Prior RDS homophily data
Obtain information needed for	<ul style="list-style-type: none"> -What remote options and procedures are acceptable to the target population? 	<ul style="list-style-type: none"> -Lessons learned from 2020 -Prior peer referral and virtual studies (NHBS, local surveys,

<p>conducting remote operations.</p>	<ul style="list-style-type: none"> -What recruitment options (e.g., online, via text message) and materials are needed? -Will potential participants feel comfortable with in-person HIV testing at a fixed site (and STI testing, when applicable)? -What are the best times to schedule appointments? -What is an acceptable incentive for the interview and testing? 	<p>published and unpublished studies)</p> <ul style="list-style-type: none"> -Prior NHBS MSM surveys -CKIs
<p>Identify potential barriers to recruitment and participation and develop solutions to address them.</p>	<ul style="list-style-type: none"> -How comfortable are MSM with recruiting and being recruited by a peer (including online)? -What are the barriers to peer recruitment (e.g., HIV stigma, distrust)? -How will we recruit important sub-populations? -Do MSM have access (or differential access) to tools needed for remote participation (smartphone, computer)? -What barriers are there to remote interviewing? -What barriers are there to in-person or remote HIV testing (and STI testing, when applicable)? -What barriers are there to provision of incentives? -What technical difficulties may we face during implementation? 	<ul style="list-style-type: none"> -Lessons learned from 2020 -CKIs, PKIs -Prior peer referral and virtual studies (NHBS, local surveys, published and unpublished studies)
<p>Develop a plan to monitor operations and recruitment through ongoing formative assessment.</p>	<ul style="list-style-type: none"> -How will we monitor overall and sub-population recruitment? -How will we monitor coupon distribution? -How will we monitor barriers to recruitment? 	<ul style="list-style-type: none"> -Software such as RDSAT, RDS Analyst, NetDraw and/or yEd -DCC Reports -BIS
<p>Describe the social and demographic characteristics of the MSM population.</p>	<ul style="list-style-type: none"> -Have demographic and social characteristic changes been observed since 2020 that would impact data collection? -Have social changes been observed since 2020 that would impact data collection? 	<ul style="list-style-type: none"> -Secondary Data Report MSM 2020 Tables 3-5 -Case Surveillance -Local studies, news reports -CKIs, PKIs, BIS, Observations

Garner the support of the MSM community and its stakeholders.	-Have our stakeholders changed since 2020? -Do we have appropriate referral sources for the community? -Do we have the support of local opinion leaders and gatekeepers?	-PKIs, meetings with community stakeholders -Marketing materials -Collaborations -Community Advisory Boards -Data dissemination activities
Develop questions of local interest for HIV prevention.	-Do we need to revise local questions from 2020?	-PKIs, meetings with community stakeholders -Marketing materials -Collaborations -Community Advisory Boards -Data dissemination activities

Acronyms: CKI, community key informants; PKI, professional key informants; BIS, brief intercept survey.

After determining gaps in knowledge, project sites should identify 1) what additional information should be collected during formative assessment, and 2) the formative assessment methods they will use to collect the information. Project sites should choose those methods that will be least burdensome, and most effective at obtaining the information necessary to understand the local MSM population using remote methods. Project sites should fill in the columns in Appendix B and develop their formative assessment interview guides to complete their Formative Assessment Plan. This plan and draft interview guides should be submitted to the site’s PO and discussed with during regular calls.

2.4 Formative Data Report

The Formative Data Report summarizes key findings from the formative assessment activities and outlines their implications for NHBS operations. Project sites should structure the report according to the following outline and use the page allocations as a guide.

- I. *Formative Data Report Purpose and Methods (1/2 page)*
- II. *2021 Contextual Factors in the HIV Epidemic (1/2 page)*
- III. *Summary of Findings to Inform RDS (1/2-1 page)*
- IV. *Summary of Findings to Inform Remote Operations (1/2-1 page)*
- V. *Barriers to Participation and Operations in NHBS (Appendix Table)*
- VI. *Ongoing Formative Assessment Plan (1/2 page)*

I. Formative Data Report Purpose and Methods

This section should provide a brief description of the site’s goals for formative assessment, the methods used to collect the data (e.g., key informant interviews, community key informant interviews), and the characteristics of those interviewed. When reporting the characteristics of those interviewed, project sites may find it helpful to present the data in a table or set of tables.

II. 2021 Contextual Factors in the HIV Epidemic

This section should summarize any critical contextual information for implementation of the MSM2021 cycle. This includes any current COVID-19 restrictions (as applicable), as well as

identified changes in HIV prevention (e.g., testing) or prevalence that may impact 2021 data collection. Sites may consider updating Table 3 from the MSM2020 Secondary Data report, but it is not required.

III. Summary of Findings to Inform RDS

This section should provide a summary of what is known about the peer networks of MSM in the MSA (including online) such as size and connectedness of different sub-groups in peer networks. Project sites can explore network size among MSM in HET and PWID cycles. Project sites should also summarize what they know about the likelihood of individuals to refer their peers based on information collected through primary (e.g., CKIs) and secondary (e.g., prior local peer-recruitment efforts) data sources. Any additional information about the social and demographic characteristics of the MSM population learned since 2020 should be noted. Project sites should discuss how their findings will inform the number and characteristics of seeds needed to ensure successful recruitment of a diverse sample of participants and their approach to recruit seeds (e.g., from online platforms, via partner agency referral).

IV. Summary of Findings to Inform Remote Operations

This section should summarize how findings will be used to conduct remote operations, such as days and hours of operation, scheduling, HIV (and STI) testing options, and virtual payments. Project sites should describe what they learned about the accessibility and acceptability of various virtual platforms that could be used to conduct the virtual interviews and testing options, and any privacy or confidentiality concerns noted.

V. Barriers to Participation and Operations in NHBS

Sites should use the Barriers to Participation and Operations Table to briefly state noted barriers and plans to overcome and monitor them for 2021 (Appendix C provides an example). Sample topics include:

- COVID-19 restrictions/accommodations
- Project marketing
- Recruiter characteristics and training
- Recruitment messages
- Recruitment barriers
- Incentive type and amount
- Participant time commitment
- Remote interviewing
- Logistical barriers to HIV testing (and STI testing, when applicable)
- Acceptance of HIV testing (and STI testing, when applicable)
- HIV apathy
- Research fatigue or distrust
- Incentive delivery processes (e.g. cash app, in-person pick-up, photo messages)

VI. Ongoing Formative Assessment Plan

This section should describe plans to monitor operations and participant enrollment and completion. It should also describe how the project site will conduct ongoing formative assessment in a remote environment (e.g., reviewing data reports in the DCC, conducting exit interviews with participants), as well as monitor local COVID restrictions and implications.

3. Focus Areas Specific to RDS and Operations NHBS in 2021

COVID-19 has greatly shifted the implementation of MSM2021 and there are several formative areas that are distinct as compared to prior MSM cycles. These include peer networks, seeds, and remote logistics and operations. A brief summary of these focus areas is below.

3.1 Peer Networks

In NHBS MSM, a “peer network” is defined as the men someone knows who are gay, bisexual, or have sex with other men, and who are at least 18 years old, and live in the *[MSA]* area. A person’s peer network is composed of friends, relatives, sex and drug use partners, and other people with whom the person associates. These may be people that the participant recently interacted with (e.g., past six months) in person, virtually, or a combination of both, and that the participant has some history with or connection (e.g., people who they know and also know them by name or nickname). Formative data can provide insight into the characteristics of the peer network of MSM, as well as the most acceptable methods for peer recruitment, which is critical to understanding how RDS sampling is likely to proceed and how recruitment can be optimized to enroll a representative sample of participants. For example, in one city, members of the MSM population interact as a single peer network, while in the second city one subgroup of MSM (e.g., 18-24 years old) is rarely connected with other subgroup of MSM (e.g., 50 years or older). In the second city, project staff would have to recruit seeds from both subgroups or seeds who are connected with both subgroups in order to efficiently reach all subgroups. Additionally, COVID-19 may have shifted peer network patterns and socialization. Exploring how MSM currently interact (e.g., in person at venues, online forums) and with whom will provide more information on seed selection.

3.2 Seeds

There are multiple criteria to consider when identifying initial recruits, or seeds, in RDS (see Chapter 4 of the *NHBS Round 6 Model Surveillance Protocol*). Ideal seeds are dynamic individuals who are extremely knowledgeable about the target population, well-connected to it, and have a vested interest in its well-being. They should also have network ties to the major sub-populations in the project area. Since seeds are the initial recruiters in RDS, it is essential that they be highly motivated to provide support for the project and encourage others to participate. Selecting effective and well-connected seeds facilitates recruitment, promotes longer recruitment chains, and helps reduce bias in the sample. During formative assessment, project sites should identify the demographic characteristics of individuals with network ties to the important sub-populations (e.g., young Black MSM) and choose seeds with those characteristics or connections. Usually, seeds are selected from a variety of sub-populations.

Project sites can identify their seeds during primary data collection through PKIs or CKIs. After explaining the RDS methods and the seed criteria, project sites can ask interviewees if they could refer potential seeds to the project or if they would be interested in being a seed themselves. In addition to using the referral card (see Chapter 5 of the *NHBS-HET5 Operations Manual*), formative assessment participants identified as potential seeds may be offered the option to provide a phone number to NHBS project staff so they can be re-contacted at the beginning of data collection to schedule their interview (see Chapter 5.3 of the *National HIV Behavioral*

Surveillance, Injection Drug Use and Heterosexuals at Increased Risk for HIV – Round 5: Formative Assessment Manual). Seeds may also be approached from virtual settings. These may include dating apps (e.g., Grindr or Scruff), group messaging sites (e.g., What’s App, Viber) or social networking sites (e.g., Facebook or Instagram), message boards used by MSM (e.g., Craigslist), or CBOs working with MSM. However, they should be vetted in the same way as other potential seeds (e.g., through CKIs) to ensure that they are well connected and motivated.

3.3 Logistics and Operations

Field operations for MSM2021 will prioritize COVID-19 safety of project staff and participants. While project sites may choose to operate out of a central office, interviews will be held remotely using a secure videoconferencing platform (see *NHBS-MSM6 Remote Interviewing Guidance* for more information on remote interviewing). The remote platform should not create a barrier to participation for any sub-populations, especially those sub-populations that have been underrepresented in previous cycles (e.g., Black MSM). Project sites should ask members of the MSM population which days and hours of operation would be most convenient for them to participate in an interview. Project sites should conduct interviews at a variety of times to accommodate members of the target population who work or are busy during those times. Project sites should also determine whether members of the target population will be allowed to virtually “walk-in” to be interviewed anytime during operating hours, and how to provide incentives remotely.

Project sites will also need to assess what is feasible, safe, and acceptable for HIV testing (and STI testing, when applicable). For example, if in-person testing is an option, sites will need to identify whether it will be self-collected, or collected by staff, and whether DBS can be self-collected. Sites will also want to collect information on how to ensure acceptance of their methods and operations.

4. Formative Data Collection Methods

4.1 Overview

Formative assessment methods used in prior cycles may be used, including secondary data review, key informant interviews, focus groups, observations, and brief intercept surveys. Note that focus groups should be used with caution given the potential difficulty of logistics and ensuring confidentiality during remote interviews. MSM2021 formative assessment activities will largely be conducted remotely, and this may impact the viability of particular methods, and has additional implications for data security (see *NHBS-MSM6 Remote Interviewing Guidance* for more information).

An in-depth description of methods is beyond the scope of this guide- please refer to the *National HIV Behavioral Surveillance System in Men Who Have Sex with Men– Round 6: Formative Assessment Manual* for more information on implementing these data collection methods for MSM cycles, and the *National HIV Behavioral Surveillance, Injection Drug Use and Heterosexuals at Increased Risk for HIV – Round 5: Formative Assessment Manual* for RDS cycles. Additional information on formative assessment methods is provided in the *Formative 101 Training*. This recorded presentation is saved on the DCC Portal and provides an overview

of qualitative methods for recruitment, interviewing and data analyses. A brief description of each method, and how they specifically apply to MSM2021 is provided below.

4.2. Methods Summary

Secondary data review

Secondary data are data that have been previously collected by other researchers, surveillance systems, or registries. A key source of information is the MSM 2020 data collection. Reviewing lessons learned from the 2020 data collection can help identify potential recruitment and operational barriers and solutions for overcoming them, as well as areas that need more exploration. Other internal data sources include prior NHBS RDS and MSM cycles. Although a project site may not have homophily data for MSM, reviewing affiliation matrices from local HET and PWID cycle data might provide some insight into potential recruitment patterns (e.g., affiliation matrices for race, age and homelessness in HET and PWID populations could be useful for exploring potential recruitment biases in MSM recruitment). Prior HET and PWID RDS cycles may also provide insights into potential recruitment barriers. Finally, other important secondary data sources may include reviews of local peer-recruitment activities (e.g., previously conducted RDS among MSM in your city if available), and local remote surveys with MSM.

Key Informant Interviews

Key informants are cultural and subject matter experts who can provide insight into the MSM population. For the purpose of NHBS, there are two main types of key informants: “community key informants” and “professional key informants.” Community key informants (CKIs) are members of the MSM community or volunteers at community-based organizations (CBOs) rather than paid professionals. Since community key informants are interviewed on their personal time, they should receive compensation for participating in the interview. Professional key informants (PKIs) are paid staff and managers of CBOs and other public health and research organizations who are interviewed in their professional capacities and are not entitled to compensation for their time. See Appendix D for a sample topic guide for interviews.

Focus Groups

Focus groups are interviews conducted with a group of individuals under the direction of a moderator. They are especially helpful for gaining insight into commonly held perceptions among MSM and for eliciting information on community norms. Focus groups can also be used to confirm other formative assessment findings or to explore findings in greater depth. However, due to the complexity of organizing and facilitating remote focus groups in comparison to other methods, as well as the implications for confidentiality, focus groups are not recommended during MSM2021 formative assessment.

Observations

Unlike information collected from interviews, observations rely solely on what is seen by the researcher. Observations can be used to both validate and build on information gathered through other data sources. Unlike in prior MSM cycles, observations will likely not be held at in-person venues. If in-person observations are conducted, they may only be conducted from outdoors, or from inside a vehicle while adhering to all CDC safety regulations (e.g., masks, social distancing, etc.). However, project sites may choose to observe virtual environments. For example, they may be used to assess the number and demographic characteristics of local MSM

who use particular dating apps (e.g., Adam4Adam, Jack'd, Scruff) and social networking sites (e.g., Facebook) to learn more about the number of MSM in the area using apps or identify potential seeds. On-going formative observations of venues which re-open may provide some information on the socializing patterns of MSM.

Brief Intercept Surveys

Brief intercept surveys (BIS) are very short surveys that focus on a few key topics, like assessing MSM network size, or gauging interest in participating in NHBS. They can be open- or close-ended and should not take more than five minutes to administer. If project sites need additional information on specific MSM sub-populations or communities, they can target their BIS to these groups. Consent is not needed for BIS, and compensation should not be provided.

5. Privacy and Institutional Review Board Procedures

Formative assessment interviews involve engagement with human subjects; therefore, project sites should obtain informed consent from individuals participating in these activities.

Appendices A, B, and C of the *NHBS Round 6 Model Surveillance Protocol* contains model formative assessment consent forms that project sites can customize for local use. To further protect the privacy of those interviewed, project sites that are required to submit the NHBS protocol to their local IRB(s) should request a waiver of documentation of informed consent from their IRB(s) so that consent can be obtained verbally. Appendix N of the *NHBS Round 6 Model Surveillance Protocol* contains a model waiver of documentation form that can be modified for local use.

NHBS data, including data collected during formative assessment, are anonymous. Interviews should never be video- or audio-taped. Participants will not be required to provide their names or other personal identifiers as a condition for participation. In order to prevent inadvertent linkage, consent forms that must be signed (due to local IRB requirement) are not labeled with a Survey ID number and are maintained separately from other documents.

For participants' convenience or benefit, participants may have the option to provide contact information to project staff on a voluntary basis. For example, participants may provide a phone number for phone text reminders of interview appointments. Provision of contact information will be optional; sites will offer anonymous alternatives to achieve project goals. Contact information will be maintained separately from all NHBS data and destroyed immediately upon completion of its intended use. If contact information (e.g. phone number) is collected, this information will only be available to local staff and will not be submitted to CDC.

6. Supplemental Documents

Project sites are encouraged to review these additional NHBS documents to inform their formative assessment activities. Some of the documents were developed for the 2020 MSM cycle and will be updated for the 2021 cycle, however they may still provide useful information and

context. Supplemental documents can be accessed on the DCC Portal. Project sites should contact their CDC Project Officers with any questions.

- *Formative Assessment 101: Formative Assessment Methods and Data Analysis* Available from: Data Coordination Center (DCC).
- *National HIV Behavioral Surveillance, Injection Drug Use and Heterosexuals at Increased Risk for HIV – Round 5: Formative Assessment Manual.* December 15, 2018.
- *National HIV Behavioral Surveillance System in Men Who Have Sex with Men– Round 6: Formative Assessment Manual.* November 8, 2019.
- *National HIV Behavioral Surveillance System Round 6: Model Surveillance Protocol.* December 18, 2020.
- *NHBS-MSM6 2021 Virtual Venues Recruitment Guidance.* [Forthcoming]
- *NHBS-MSM6 Remote Interviewing Guidance.* August 7, 2020. [Will be updated based on site feedback and lessons learned]
- *NHBS-MSM6 Testing and Specimen Collection Guidance.* July 29, 2020. [Will be updated based on site feedback and lessons learned]

Appendix A. Model Implementation Timeline

[Project Site] NHBS-MSM2021 Implementation Timeline

Task	Due Date	2021																											
		January				February				March				April				May				June							
Develop Implementation Timeline																													
Submit Implementation Timeline	2/8																												
Prepare IRB package																													
Submit IRB package	1/29																												
Obtain IRB approval																													
Prepare Formative Assessment Plan																													
Submit Formative Assessment Plan	2/22																												
Collect formative assessment data																													
Write Formative Data Report																													
Submit Formative Data Report	4/23																												
Develop local questions																													
Hire field staff																													
Train field staff																													
Obtain incentives																													
Obtain testing/other supplies																													
Complete Operations Checklist	4/16																												
Submit Final Operations Checklist	5/18																												
Start survey data collection	6/1																												

Appendix B: [Project Site] NHBS-MSM2021 Formative Assessment Plan Template

Formative assessment objective	Formative assessment questions	Possible data sources	Additional information to collect during formative assessment	Formative assessment methods
Describe the peer network characteristics among MSM populations, and their willingness to use peer recruitment.	<i>[example] How willing are MSM to recruit peers remotely (including online platforms)?</i> <i>How large are MSM peer networks?</i>	<i>[example] Prior online sexual health study completed by University X with students that used peer-driven sampling methods</i> <i>Survey of social media apps and publications on peer networks</i>	<i>[example] Is there a difference between sub-populations in their comfort with remote recruitment?</i> <i>What differences are there between in-person and online peer network size?</i>	<i>[example] CKIs with local MSM, especially with older MSM, with MSM in who are under-represented in prior cycles (Black), and non-students</i> <i>CKI with MSM and sub-populations of interest</i>
Identify potential “seeds,” or initial recruits, for respondent-driven sampling (RDS).				
Obtain information needed for conducting remote operations.				
Identify potential barriers to recruitment and participation and develop solutions to address them.				
Develop a plan to monitor operations and recruitment through ongoing formative assessment.				
Describe the social and demographic characteristics of the MSM population.				

Garner the support of the MSM community and its stakeholders.				
Develop questions of local interest for HIV prevention.				

Acronyms: CKI, community key informants; PKI, professional key informants; BIS, brief intercept survey.

Appendix C. [Project Site] NHBS-MSM2021 Barriers to Participation and Operations: Summary of Formative Assessment Findings

Barriers documented during formative assessment	Implications for data collection, and a plan to address barriers	Implications for ongoing formative assessment

NOTE: Add as many rows to the table as needed to document barriers to participation and field operations.

Appendix D: Model Formative Assessment Topics and Interview Questions

Below is a list of model formative assessment topics and interview questions that project sites can use to develop interview guides and brief intercept surveys. Sites should adapt the questions to the type of interview being conducted and to the background of the individual(s) being interviewed. Sites can also modify the questions to focus on MSM sub-populations, like young MSM or racial and ethnic minority MSM.



The example interview questions use the term MSM. When interviewing community members and other non-professionals, project sites should replace “MSM” with “gay and bisexual men” or some other locally acceptable term.

Before interviewing each primary data source, project sites should briefly describe NHBS-MSM2021, including the respondent-driven sampling (RDS) method and the process of recruiting survey participants through their peer networks.

A.1 Learning about the Target Population and Sub-Populations

Project sites can modify these questions for local use to learn about demographic, peer network, and other key characteristics of the target population and specific sub-populations. This information will help project sites develop and implement NHBS methods and remote operations and logistics.

Demographics

- What are the demographic characteristics of [*MSM/specific sub-population*] (e.g., age, race/ethnicity, gender, income, residence)?
- What specific sub-populations among [*MSM*] are most important to the HIV prevention efforts in [*project area*]?
 - What are the sub-populations that are particularly difficult to reach? What strategies have been successful in reaching them?
- How do the different sub-populations of [*MSM*] interact with one another (e.g., age groups, race/ethnicity, socioeconomic status)?
 - *For sub-populations that do not interact: Why not? How could this impact peer recruitment in our survey?*

Peer networks

A “peer network” in the NHBS-MSM cycle is defined as the number of gay, bisexual, or MSM, and who the participant knows, and are at least 18 years old and live in the [*MSA*] area. A person’s peer network is composed of friends, relatives, sex and drug use partners, and other people with whom the person associates. These may be people that they recently interacted with (e.g., past 30 days) in person, virtually, or a combination of both, and that they have some history with or connection (e.g., people who know them, and they know by name or nickname).

- What are the typical demographic compositions of the peer network of MSM in *[MSA]*?
 - How do the demographic compositions (e.g., age groups) of the peer networks vary among different sub-populations?
- How many MSM would you say most MSM know in the area?
 - How does the number of peers vary among different sub-populations (e.g., MSM of different age groups or different race or ethnicity)?
- Are there MSM sub-populations that primarily communicate online?
 - What is the size of your online network, meaning the people you follow who you know or interact with remotely?
 - What about the number of people who you know are MSM who you interact with through online platforms? This can include social media apps, messaging platforms, or other virtual spaces.
 - How many people who are MSM have you interacted with only through online platforms in the past 30 days?
 - For example, does network size differ between those who are networked primarily online versus in-person?
 - How does this vary among different sub-populations?
- How could the demographic composition (e.g., age, race/ethnicity) or size of the peer network of *[MSM/specific sub-population]* impact peer-recruitment in our survey? For example, if younger and older people do not associate with one another, efforts will be needed to ensure that younger and older seeds are selected and produce chains of peer recruits.
- How do [MSM] in *[MSA]* typically interact with each other?
 - Would you say they mostly interact in person, online (e.g., exchanging messages on dating apps, posting to online forums), or some combination of both? Can you tell me more about that? (Probe to identify whether these people likely have an online-only relationship with each other or have met in person, whether they noticed changes that happened during the COVID-19 epidemic and restrictions).
 - Does this vary by specific sub-population (e.g., younger MSM vs older)?
 - How do you think online interactions and relationships could impact peer-recruitment? (Probe: For example, would MSM consider recruiting other MSM they know online, but haven't met in person? What about those they initially met online, but also know in-person?)
- How do you think MSM will recruit others? Do you think they will use online methods like social media or direct messages, text messages, or recruiting when they see people in person? Can you tell me more about that? What methods do you think would be most successful in encouraging others to participate?

- How likely would you be to participate in a survey like NHBS if you were recruited online? Why/why not?
- What would influence you to participate? (probe for detail on what would encourage participation like knowing the recruiter in-person, learning about the incentive etc.)
- How likely would you be to recruit someone else online (probe to identify how well they would have to know someone to recruit or be recruited online)?
- How likely would you recruit someone you know in-person? Why? (probe to identify their preference for who they would recruit)

A.2 Exploring Remote Operations

Project sites can modify these questions for local use to ensure successful remote operations and logistics by assessing the feasibility of potential remote technologies for interviewing and HIV testing (and STI testing, where applicable); identifying acceptable incentives for the survey and HIV test (and STI test, when applicable); and identifying which local prevention, health care, and social services are available for making referrals and linkages to care.

Remote interview technology and hours of operation

- What remote videoconferencing applications do local MSM use?
 - Does this vary by sub-population?
 - How comfortable are *[MSM/specific sub-population]* in using video-conferencing *technology*?
 - How comfortable are *[MSM/specific sub-population]* participating in an interview where they are on camera using video-conferencing *technology*? (If not comfortable, probe the reasons, and whether they would they prefer voice-only interviews).
 - Does access to the technology vary by sub-population?
- What days of the week and times of the day would be best for *[target population/specific sub-population]* to participate in a remote interview?
- Should we set up appointments for participants to do the interview, should we allow them to call in anytime during operating hours, or both?
- Our recruiters plan on using this script to invite MSM to participate in the survey [insert recruitment strategy e.g. by messaging potential seeds in virtual venues, reaching out to PKIs and CBOS] *[Show script]*
 - What can we change or add to make the script more effective at encouraging MSM to participate?
 - What other suggestions do you have for improving the script?

Incentives

- We will give participants an incentive for completing the survey and another incentive for taking the HIV test (and STI testing, where applicable). The survey takes approximately 40 minutes to complete and the HIV test, *[insert time]*. What would appropriate incentive amounts be for each?
- What type of incentive, like cash, Visa gift card, or retail gift card, would be most desirable to the participants?
 - How would they want to obtain their incentives remotely? (probe with examples for how your site plans to distribute incentives e.g. at in-person HIV testing, texting photos of gift cards, via Cash App).
- We are also going to give incentives to participants for recruiting their peers to come in and take the survey. What would be an appropriate incentive for recruiting another person? How would they want to obtain their incentives for peer recruitment remotely?
- Are there other remote incentives that would encourage people to participate?

Local prevention and social services

- We provide referrals to our survey participants for a variety of HIV prevention, health care, and social services. What HIV prevention, health care, or social service information would be most helpful to provide MSM? (Probe and provide examples of remote services like organizations offering telehealth options during pandemic)
- We also provide linkage to HIV care and treatment services. For participants who test positive for HIV, where would MSM feel comfortable going for HIV care and treatment?

Names of local public health insurance programs

- Information on health insurance programs is collected to help interviewers code the types of public health insurance reported by participants.
 - What are the names of the public health insurance programs that are available in *[project area]*?
 - Are there acronyms or “street names” for these programs?

A.3 Identifying and Addressing Barriers to Survey Participation

Project sites can modify these questions for local use to identify barriers to survey participation, HIV testing, and if applicable, sexually transmitted infection (STI) testing. Whenever a primary data source identifies a barrier to survey participation, project sites should follow-up and ask the source to propose a solution to overcome that barrier.

General

- What are the barriers to MSM participating in our survey?
 - What suggestions do you have for overcoming these barriers?
- Are there any barriers to survey participation that are specific to MSM sub-populations (e.g. young MSM or racial and ethnic minority MSM)?
(This question is particularly important if any MSM sub-populations were underrepresented in previous NHBS-MSM cycles.)
 - What suggestions do you have for overcoming these barriers?
- What are the barriers to survey participation that are specific to remote operations (e.g., access and comfort with online platforms)?
 - What suggestions do you have for overcoming these barriers?
- What challenges have you encountered when working with the MSM community (e.g., trust, HIV testing, incentive type or amount, community support, accessing MSM sub-populations)?
 - How do you think these challenges will affect the success of our survey?
 - What suggestions do you have for overcoming these challenges?
- How have those challenges changed during the COVID-19 pandemic? (probe are there new challenges, what are those challenges)
 - How will these new challenges affect the success of our survey?
 - How can we overcome these challenges?
- How can we foster trust among the MSM community?
 - Does the MSM community perceive researchers or other community outsiders differently?
- How can we motivate MSM to participate in our survey? (probe for online and in-person)

HIV testing, blood specimen storage, and additional testing

- What are the perceptions of HIV testing in the MSM community?
 - Is there stigma or fear about being tested?
 - What are barriers for being tested at an in-person testing location?
 - What are the barriers to using *[testing method]* HIV tests?
 - Would MSM avoid participating in the survey if HIV testing is offered?

- What suggestions do you have for overcoming barriers to HIV testing among MSM?
- *For sites considering at-home HIV self-testing:* What are the perceptions of HIV self-testing in the MSM community?
 - Would MSM find it acceptable to complete an at-home HIV self-test as part of the study?
 - Is there fear associated with self-collection of oral samples or self-testing for HIV?
 - What are the barriers to being tested at home or another preferred location?
 - What are the barriers to using an at-home HIV self-test?
 - What are the barriers to receiving an HIV self-test kit at home or another preferred location?
 - How important is it to have a staff person present at the time of collection to guide a person through the self-testing process?
 - What suggestions do you have for overcoming barriers to HIV self-testing among MSM?
- What are the perceptions of HIV-positive persons in the MSM community?
 - Is there stigma or fear about disclosing an HIV-positive status?
 - What suggestions do you have for overcoming barriers to disclosing an HIV-positive status among MSM?
 - What motivators could support MSM who are HIV-positive and aware of their status to participant in in-person or remote testing after the interview?
- In addition to the HIV test, we plan on collecting blood specimens for storage for future tests, such as tests for HIV viral load, recent HIV infection, and antiretroviral drugs. Blood specimens will be collected with a fingerstick and saved on a card. Results from any future tests will not be returned to participants.
 - How will the MSM community perceive blood specimen storage for future tests?
 - Will MSM be willing to provide blood specimens for storage for future tests?
If no: How can we encourage MSM to provide blood specimens for storage for future tests?
 - *For sites considering self-collected DBS:*
 - Would MSM find it acceptable to complete a self-administered fingerprick and collection of dried blood spots as part of the study?

- What are barriers to self-administered fingerprick and collection of dried blood spots?
 - How important is it to have a staff person present at the time of collection to guide a person through the collection process? [versus written instructions]
 - What suggestions do you have for overcoming barriers to a self-administered fingerprick and collection of dried blood spots among MSM?
- *For sites that plan on offering additional tests:* In addition to the HIV test, we plan on offering [*types of tests*].
 - How will these tests be perceived by MSM?
 - Will these tests present a barrier to participation in our survey or will they motivate MSM to participate?

If yes to barriers: Please describe the specific barriers. What suggestions do you have for overcoming these barriers?

If yes to motivation: Please describe specific ways these additional tests will motivate MSM to participate.

For sites that plan on offering STI tests: STI testing

Formative assessment for STI testing includes questions about current STI specimens (oral and anal swabs) and the feasibility of collecting other STI specimens such as urine in the future.

- In addition to the HIV test, we plan to offer STI testing. This will include oral and anal swab collection and may include urine collection for gonorrhea and chlamydia tests.
 - Will offering STI tests make MSM more or less likely to participate in the survey?
 -
 - Please describe the specific barriers to self-collected STI tests.
 - What suggestions do you have for overcoming these barriers?
 - What would be an appropriate incentive amount for providing oral and rectal specimens for gonorrhea and chlamydia testing?
- In order to provide STI collection kits when doing remote interviews, MSM would either need to have a collection kit sent to them or go to a location to get the supplies.
 - Which method for receiving a collection kit is preferred – sent or picked-up?
 - Describe the challenges to having a collection kit sent to them directly.
 - How could these challenges be overcome?

- Describe the challenges to going to a location to pick-up the supplies.
 - How could these challenges be overcome?
 - Would MSM be willing to complete self-collection of the oral and rectal samples at the time of pick-up, if there was a private location to complete the self-collection process? Why or why not?

- There are several options for where a person can collect their specimen. Where is a preferred place to collect pharyngeal and rectal swabs?
[Prompts: In a mobile unit, home, work, clinic, outdoor location with private space (screen, pop-up tent) where picked-up collection kit]

- How important is it to have a staff person present or available at the time of collection to guide a person through the collection process? [versus written instructions]

- How many days after completing the interview will a person be interested in HIV and/or STI testing?

- Gonorrhea and chlamydia test results will be available 1-2 weeks after testing.
 - What are some potential strategies for anonymously returning test results to MSM?
 - Would MSM feel comfortable receiving test results over the phone? A security question would be used to determine that the person on the phone is the participant.
If yes: Would MSM prefer to call to obtain their results or would they prefer to have a project staff member call them?
If yes: Would MSM be willing to provide their phone numbers for staff to call them with their results? Phone numbers would remain in a locked filing cabinet in the project office and a security question would be asked to determine that the person on the phone is the participant. Documents with phone numbers would be destroyed at the end of the study.
 - What are motivators to encourage MSM to receive their STI results?
 - Would MSM prefer to be called with their test results regardless of the test results or only if they have a positive test result?

- MSM with positive gonorrhea and chlamydia test results will be referred for care and treatment.
 - What are some potential strategies for anonymously linking MSM to STI care and treatment?
 - Where would MSM feel comfortable going for STI care and treatment?
 - Where would MSM feel uncomfortable going for STI care and treatment?

- We would like to set up an anonymous referral system to allow MSM with positive STI test results obtain same-day treatment. Which clinics, physicians, or health department staff could work with us to develop this anonymous referral system?
- Which clinics have protocols that require retesting at time of treatment?

A.4 Garnering Community Support

Project sites can modify these questions for local use to identify MSM stakeholders, develop marketing materials, and establish collaborations with other programs or organizations that provide health care and social services to members of the MSM community or that conduct venue-based outreach or research.

Identifying MSM stakeholders

- Who are the leaders of the MSM community?
 - Do they represent any specific MSM sub-populations?
If yes: What sub-populations do they represent?
 - What about online leaders of the MSM community?
- Which key individuals or groups provide services to the MSM community?
 - Do they provide services to any specific MSM sub-populations?
If yes: To which sub-populations do they provide services?
 - What new groups or individuals have emerged in providing services to the MSM community as a result of the pandemic?
- Which key individuals or groups advocate for issues affecting the MSM community?
 - Do they advocate for any specific MSM sub-populations?
If yes: For which sub-populations do they advocate?
 - What is their online presence like? (probe about social media followers and online activities)
- Which key individuals or groups could advocate for our survey and promote it among the MSM community?
 - Who could promote our survey among [*specific sub-population*] MSM?
 - Who could promote our survey among: MSM community leaders, service providers, and advocates?
 - Who could promote our survey online?
- What is the best way for us to gain support for our survey from the MSM community?

- What is the best way for us to gain support from *[specific sub-population]* MSM?
- What is the best way for us to gain support from: MSM community leaders, service providers, including those who provide HIV testing, and advocates?
- What about gaining support in online and virtual spaces?
- What survey findings would be beneficial to you or your organization?
 - Are there any key HIV risk or prevention topics among MSM that we should explore with local questions?
 - Are there any important topics we should explore with local questions that could help with the development or evaluation of policies or programs?
 - Who would be interested in learning the findings from our survey?

Developing marketing materials

- Which marketing strategies (e.g., flyers, posters, gay media, social media, dating apps) would be most effective at reaching the MSM community?
 - Which marketing strategies would be most effective at reaching *[specific sub-population]* MSM?
- Which marketing messages would be most effective at encouraging MSM to participate in our survey?
 - Which marketing messages would be most effective at encouraging *[specific sub-population]* MSM to participate in our survey?

Establishing collaborations

- Does your program or organization provide health care or social services to the MSM community?
 - *If yes:* How can we collaborate so that appropriate referrals are given to participants in our survey?
 - Have you changed/modified what you provide as a result of the COVID-19 pandemic? What have you changed? How do you anticipate those changes shifting in the coming months into fall?
- Does your organization use online platforms like social networking apps (e.g., Facebook, Instagram), geosocial social networking apps (e.g., Grindr, Scruff, AAdam4Adam...) or web-pages of CBOs that are working with MSM to reach out to MSM population in your area?
 - *If yes:* How can we collaborate with the parts of these organizations that conduct online outreach to the MSM community in our area to learn more about their best practices, challenges and successes?

- *If no:* What is the best way to present our intentions of recruitment from online platforms to health departments and companies who are in charge of these apps?

- Does your program or organization conduct HIV testing among MSM in [*project area*]?
 - *If yes:* How can we coordinate our activities so that the projects can support each other?
 - *If no:* Is this due to the pandemic? Do you plan on offering testing again in the future? When do you anticipate restarting testing?